Austria ... Sch. 18	Indonesia ... Rp 2500	Portugal ... Esc 75
Bahrain ... Din 0.650	Italy ... L 1100	S. Arabia ... Rls 6.00
Belgium ... BFr 38	Japan ... Y560	Singapore ... S$ 4.10
Canada ... C$1.00	Jordan ... Fils 500	Spain ... Pts 100
Cyprus ... Mils 500	Kuwait ... Fils 500	Sri Lanka ... Rup 30
Denmark ... Dkr 7.25	Lebanon ... LL 6.00	Sweden ... Skr 6.50
Egypt ... E£1.00	Luxembourg ... LFr 38	Switzerland ... SFr 2.00
Finland ... Fmk 5.60	Malaysia ... Rm 4.75	Taiwan ... NT$ 35
France ... Fr 6.00	Mexico ... Pes 300	Tunisia ... Din 0.600
Germany ... DM 2.20	Morocco ... Dh 6.00	Turkey ... L 180
Greece ... Dr 60	Netherlands ... Fl 2.50	U.A.E. ... Dh 6.50
Hong Kong ... HK$ 12	Norway ... Nkr 8.00	U.S.A. ... $1.50
India ... Rup 15	Philippines ... Pes 20	

FINANCIAL TIMES

EUROPE'S BUSINESS NEWSPAPER

No. 29,318 Wednesday May 9 1984 D 8523 B

Nigeria prepares for austerity, Page 4

NEWS SUMMARY

GENERAL

Fighting breaks out in Tripoli

Fighting broke out in Tripoli as Libyan security forces moved against dissidents.

Observers in the city denied reports that there had been an attempted coup against Col Muammer Gadaffi, or that, as reported from Rome, a group using rockets and automatic weapons had attacked the barracks where Col Gadaffi lives.

An Italian news agency report said that the attackers had been driven back by armoured vehicles, and that a group of 20 were holding out, surrounded by loyal units.

Tripoli businessmen said the shooting started in the morning when armed forces cleared residents from an apartment block. Page 20

Quebec shoot-out

Canadian police captured a soldier about 3½ hours after he had gone on a 30-second shooting spree in the Quebec assembly, killing three and wounding at least 13, mostly provincial assembly employees.

Pope plot trial

An Italian state prosecutor has recommended that three Bulgarians and four Turks stand trial in connection with the 1981 Rome assassination attempt on Pope John Paul.

Soviet build-up

Soviet Union has parachuted troops and equipment into Afghanistan's Panjsher valley and consolidated its positions, say Western diplomats in Islamabad.

Panama tension

Panama faced serious political violence after fighting broke out around the parliament building, where general election votes were being counted. Page 4

Biggest UK trial

The biggest trial in British history opened in Belfast when 40 alleged Irish terrorists, three of them women, faced terrorism and arms charges.

Thames barrier open

Queen Elizabeth opened the £460m ($638m) Thames flood barrier.

Italian earthquake

An earthquake shook the Abruzzi region in southern Italy, killing three, injuring at least 83 and leaving 3,300 homeless.

Rain flooded some parts of the Appalachian region of the U.S. up to eight feet (2.4 metres). More than 10m people in Northern China are suffering from water shortages because of drought.

Ulster killing

Gunmen killed a part-time Ulster Defence Regiment soldier as he arrived for work as a hospital porter at Dungannon. The IRA claimed responsibility.

Violence in Reims

At least seven people were hurt and 12 arrested during a demonstration against a meeting of France's extreme right-wing National Front party at Reims.

Rome taxi strike

Thousands of taxi-drivers blocked Rome streets with their vehicles and launching an indefinite strike for higher fares.

India goes ahead

India confirmed that it is going ahead with building a barbed-wire fence along the Bangladesh border. Page 4

BUSINESS

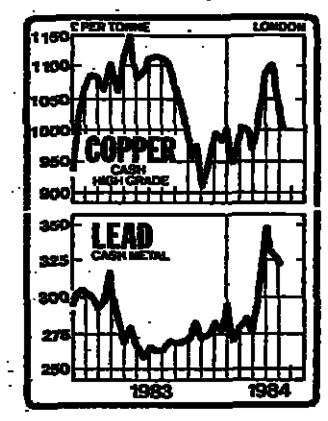
U.S. utility defaults on loan payment

PUBLIC SERVICE New Hampshire, a major U.S. power company, is on the edge of bankruptcy after failing to pay its bankers a $3m instalment on a loan. An attempt will be made this week to arrange new financing. Page 20

LONDON: FT Industrial Ordinary index fell 10.6 to 904.8. Government securities fell by an average of just over 0.5 per cent. Report, Page 33, FT Share Information Service, Pages 34, 35.

WALL STREET: Dow Jones industrial average was up 9.74 at 1,176.39 at the close. Report, Page 29. Full share prices, Pages 30-32

TOKYO: Nikkei Dow index fell 106.52 to 11,052.44, and the Stock Exchange index by 8.29 to 886.21. Report, Page 29. Leading prices, other exchanges, Page 33



COPPER prices tumbled in London, with the cash price £33 down at £1,005 ($1,390.4). Lead, too, was down, with the cash price £10.25 lower at £320.5 ($443.4) a tonne. Page 38

DOLLAR strengthened as U.S. interest rates continued to firm. Despite Bundesbank intervention, it rose from Friday's DM 2.741 to DM 2.7787 in London, to FFr 8.5325 (FFr 8.3525), SwFr 2.281 (SwFr 2.249) and Y229 (Y226.75). Its Bank of England trade-weighted index rose from 129.6 to 131.7, its highest since late January. Page 39

STERLING closed 2.60 down from Friday, at $1.3835, and slipped to SwFr 3.1575 (SwFr 3.1725) and Y317 (Y320), but improved to DM 3.85 (DM 3.8375) and FFr 11.8 (FFr 11.77). Its trade-weighting fell from Friday's 80.5 to 80. Page 39

GOLD fell $4.5 to $372.25 in London. In Frankfurt it closed at $372, and in Zurich at $371. Page 38

HUNGARY plans to let workers in most enterprises elect their managing directors and to allow greater wage differentials. Page 3

PORTUGAL: Seven international banks have applied to open branches after liberalisation of banking laws. Page 21

SOVIET geologists have found a field of high-quality oil near the Aral Sea in central Asia.

SAN MIGUEL Philippines' biggest quoted company, is to raise 1bn pesos ($71.4m) locally. Bigger beer sales helped it to raise net profit in 1983 by 30 per cent to 403.6m pesos.

BURNS, FRY Toronto broker, is to acquire Jones, Heward of Montreal. Page 21

IOR, the Vatican bank, is to pay the creditors of the failed Banco Ambrosiano $244m on June 30 as part of a $406m "recognition of moral involvement," and will agree to submit itself, for the first time, to Italian law. Page 21

The editorial content of today's international edition has been restricted because of continuing industrial action by IG Druck und Papier at Frankfurter Societäts-Druckerei, where the edition is printed. This prevents the publication of late-breaking news, the final Wall Street report and closing U.S. over-the-counter and Canadian share prices.

Volcker attacked by White House as prime rises

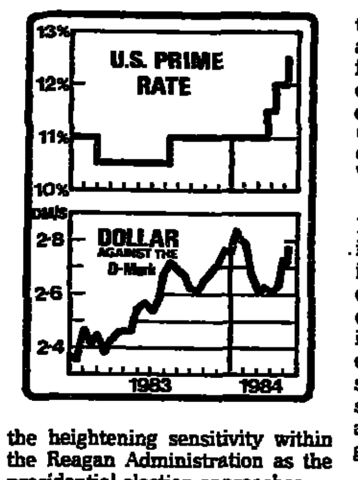
BY STEWART FLEMING IN WASHINGTON AND PAUL TAYLOR IN NEW YORK

A MAJOR row between the White House and the Federal Reserve Board was brewing yesterday over the central bank's conduct of monetary policy. The White House exploded on the Fed after the leading U.S. commercial banks raised their prime lending rates to 12.5 per cent, the highest level since October 1982.

The third half-point prime rate increase of the year sparked sharp criticism of the Fed by White House spokesman Mr Larry Speakes. "It appears the money supply is not accommodating real economic growth," he said. Mr Speakes attacked Fed chairman Mr Paul Volcker for putting too much emphasis on fighting inflation in the conduct of Fed monetary policy. "We have lived up to our promise of low inflation," he said.

But in a move which could presage new divisions within the Administration, Mr Martin Feldstein, chairman of the President's council of economic advisers, defended the central bank saying that recent shifts in Fed policy were "not inappropriate."

The White House riposte brings to an end a period during which officials have been cautious not to attack the Fed in public and signals the heightening sensitivity within the Reagan Administration as the presidential election approaches.



The prime rate increase promises to have worrying international, as well as domestic, repercussions because of the deepening anxieties about the implications of higher rates for debt-ridden Third World borrowers. Mr Volcker recently described the danger of a rapid rise in international interest rates as "the greatest single threat" to the resolution of the Third World debt crisis.

Echoing these concerns, Mr Feldstein, yesterday issued a warning that "the shape of the yield curve and the prices in the interest rate futures market imply that a significant rise in short rates is expected over the next 18 months." He also called for the industrial countries to change their approach to the Third World debt problem.

Separately, the International Monetary Fund fuelled the deepening controversy about U.S. economic policy. In its report on the "world economic outlook" released yesterday, the IMF warned that "the high interest rates prevailing in the United States and the associated strength of the dollar appear to constitute a potential threat to smooth and sustained global economic growth."

Elsewhere in the report, the IMF cites sustained growth and declining interest rates as crucial variables if the Third World debt crisis is to remain managable.

Yesterday's prime rate increase was expected because of the continued upward movement in other US short-term market rates resulting in higher bank funding costs.

Continued on Page 20

Hope for Third World, Page 4; Lex, Page 20 Money Markets, Page 39

Saudi tanker set ablaze by Gulf missile

BY RICHARD JOHNS IN LONDON AND KATHY EVANS IN DUBAI

A SAUDI-OWNED oil tanker, the 117,000 dwt. Al Ahood, was last night ablaze in the Gulf about 80 miles south-east of Kharg Island, where it had loaded Iranian oil.

The incident was believed to be the result of the second Iraqi attack by an aircraft-launched Exocet missile on a Saudi-registered vessel carrying Iranian oil in the past 12 days.

The position of the Al Ahood would mean that the missile must have been delivered by one of the five Super Etendard aircraft supplied to Iraq by France.

Leading Lloyds underwriters yesterday raised war risk premiums on seven-day voyages to the Gulf from 1.5 per cent to 2 per cent of hull value. The latest attack is also bound to raise cargo rates which had already climbed above 0.75 per cent in the wake of the explosion on the Safina al-Arab tanker on April 25.

The Al Ahood was reported last night still to be ablaze as fire-fighting and salvage vessels sped to it from Bahrain. One member of the crew was killed by the explosion, which took place on Monday night, but the rest of the crew were rescued by a passing Greek vessel.

Earlier Iraq had claimed that its air force had successfully attacked two targets "believed to be vessels from the Iranian Kharg Island." No other damage to ships apart from the Al Ahood was reported yesterday however.

The latest incident is bound to strain relations between Iraq and Saudi Arabia, which has been mainly responsible for keeping its Arab ally financially afloat in its long conflict with Iran.

Last week President Saddam Hussein of Iraq appealed to "Arab brothers" not to charter ships for loading oil at Kharg Island.

Mr Tariq Aziz, Iraq's First Deputy Prime Minister, is understood to have gone to Riyadh for talks with Prince Saudi al-Faisal, the Saudi Foreign Minister, following the explosion aboard the Safina al-Arab. The Saudi Government apologised that ships carrying its national flag had been helping Iran export oil, according to Arab diplomats.

The Al Ahood is owned by the Amar Liones Maritime Company which is based in Jeddah. A leading shareholder is the Saudi entrepreneur Mr Gaith Pharoan who is a former Royal Advicer.

It is managed by Shipping Management S.A.M of Monte Carlo and had been on charter to an "Mediterranean" oil concern, according to the owners. They did not reveal its name but the company in question is understood in shipping circles to be Cameli of Geneva.

Soviet athletes to miss Olympics

By Reginald Dale in Washington and Anthony Robinson in London

THE SOVIET Olympic Committee yesterday announced that Soviet athletes would not take part in the 1984 summer Olympics in Los Angeles. Some East European teams are expected to follow the Soviet lead, although Romania said last night it would take part.

The loss of Soviet bloc competitors, who normally take a high proportion of gold and other medals over a wide range of sports, is likely to reduce the validity of the sporting competition, as did the U.S.-led, partial Western boycott of the 1980 Moscow games.

Intense diplomatic activity was under way last night to convince the Soviet Union to change its mind on the boycott decision which was condemned by Washington as a "blatantly political action" that was totally without foundation or justification.

There was also some speculation in London that the Soviet Union might be planning to stage an alternative contest to the Los Angeles Games.

In an official statement, the Soviet Olympics Committee, nominally independent but in practice subject to state control, blamed the U.S. Government for its decision.

It accused the U.S. of continuing "rudely to interfere in affairs belonging exclusively to the competence of the Los Angeles Olympic organising committee" and of "using the games for its political aims."

The statement said "chauvinistic sentiments and anti-Soviet hysteria are being whipped up," and that what it termed "unbearable condition" for Soviet delegation and athletes were being created by "extremist organisations and groupings of all sorts ... with direct connivance of the American authorities."

Soviet emigré and other organisations have announced their intention to hold anti-Soviet demonstrations during the Olympics and to help any Soviet athlete wishing to defect.

Unofficial Soviet sources believe the prospect of mass defections from the Soviet team on U.S. soil is the real reason behind the Soviet decision, together with a desire to underline dramatically Soviet displeasure with President Ronald Reagan in a U.S. election year.

The Olympic participation Soviet decision has come three weeks before the June 2 deadline. Mr Juan Antonio Samarach, president of the International Olympic Committee, met President Reagan in Washington shortly after the Soviet decision was announced.

Pressure on UK banks to increase base rates

BY PHILIP STEPHENS IN LONDON

RISING U.S. interest rates yesterday strengthened pressure in financial markets for an increase in Britain's base lending rates despite the announcement of lower-than-expected money supply growth last month.

Provisional Bank of England figures showed that the most closely-watched measure of the money supply, sterling M3, grew by only ½ per cent in April, well below most expectations in the City of London.

A brief rally in the gilts and money markets was short-lived, however, as U.S. banks lifted their prime rates and further widened the gap between British and U.S. levels.

Leading UK banks indicated that they would decide within the next few days whether to raise their base rates to 9 per cent, but there were signs last night that an upward move could come as early as today.

The banks' rates are currently set at 8½ per cent, except for Barclays' which is at 8¾ per cent and subject to more frequent changes through a market-related formula.

The small rise in sterling M3, which takes its annual growth over the last 12 months to 8¼ per cent, well inside the present 6 to 10 per cent target range, surprised financial markets.

But statistics indicating that the increase in April was held down by erratic external influences and changes in the banking sector's capital base tempered sentiment that money supply growth is slowing.

A further strong rise in bank lending to the private sector, up £1.5bn ($2.07bn) in April, also encouraged speculation that base rates will rise, while upward pressure on producer prices caused some anxiety over future inflation.

The key three-month interbank rate, at which banks borrow much of their funds, rose to just under 9½ per cent at the close, at level which wipes out the profits the banks can make on loans to blue-chip customers.

Datastream agrees to Dun & Bradstreet bid

BY CHARLES BATCHELOR IN LONDON

DUN & BRADSTREET, the U.S. business information group, is to make a £73m ($102.8m) agreed cash bid for Datastream, the British financial information group. D&B has already gained acceptances for its offer from the owners of 53.3 per cent of Datastream's shares.

D&B, which claims to be the world's leading credit rating agency – assessing companies on their ability to pay their bills – last night announced it will offer 550p for each Datastream share. Datastream was suspended earlier in the day at 380p.

Mr David McBride, vice president of D&B said: "Datastream fits perfectly into D&B's corporate policy of expanding further into the business information sector. It seemed to us they were a clear leader in a very important market segment. Our world-wide data base will add a dimension to their primarily stock-based information service."

Both companies concentrate on supplying historical information, mainly on companies, to analysts working in the "back rooms" of financial groups.

Mr Paul Bosonnet, Datastream chairman, said: "We first held discussions a few weeks ago but things really came to a head in the last couple of days. They can provide something from their wide international basis which we would lack on our own."

D&B started out in 1841 as a credit information service – it owns

Continued on Page 20

AEG sharply lifts profits in quarter

BY JONATHAN CARR IN FRANKFURT

AEG-Telefunken, the West German electricals group, is well on the way to making 1984 its second profitable year in a row, after sharply increasing earnings in the first quarter.

Herr Heinz Dürr, the chief executive, also announced that AEG would definitely meet the September deadline for paying back more than DM 1bn ($359.7m) of debt to key creditors.

Despite AEG's progress – world-wide group net profit in 1983 was DM 37m after an operating loss of DM 932m in 1982, Herr Dürr stressed that much remained to be done.

Profits were still too low and net financial liabilities too high, although the latter had been cut by DM 700m to a total DM 1.8bn during 1983.

In particular, Herr Dürr saw no early prospect of a capital increase or of restoring dividend payouts which have been suspended since 1973.

Despite Herr Dürr's low-key remarks, the results are widely seen as marking a big turnround for the company, which came close to financial collapse in 1982 and had to seek court protection from its creditors.

Under the terms of the Vergleich – composition proceedings – accepted in March last year, AEG was released from 60 per cent of its debt burden, but agreed to pay the other 40 per cent in 18 months at the latest.

AEG's creditor banks have agreed to make available the sum of DM 1.04bn due to them through the Vergleich as a new credit for AEG from September.

In future, however, AEG will have to pay interest on the loan, from which it was freed during the Vergleich, of perhaps around DM 100m annually. This was one reason for Herr Dürr's cautious comments about prospects.

Last year's earnings improvement came against the background of a fall in group sales of 1 per cent to DM 11.5bn and a cut in the labour force of 12 per cent to 76,600.

Coping with success, Page 19; Siemens boosts profits, Page 21

U.S. court delays Shell deal

By Terry Dodsworth and William Hall in New York

ROYAL DUTCH Shell's takeover plan for the minority share holding of Shell Oil, its U.S. subsidiary, was faced with serious delay yesterday after a U.S. court backed dissident shareholders seeking to block the deal.

Shell Oil shares fell $⅛ to $57¾ immediately after the news.

Only a day before the tender offer was due to close, the Vice Chancellor of a Delaware court, Mr Maurice Hartnett, granted a preliminary injunction against Royal Dutch until it made "further disclosures to the tender offeres."

The original offer was scheduled to expire at midnight tonight. Ahead of yesterdasy's judgement, however, there had been considerable doubt as to whether Royal Dutch would be able to win control by tonight.

The court action was brought by minority shareholders who were dissatisfied with the offer price and had sought more information from Royal Dutch.

CONTENTS

Soviet proposal holds promise of progress on boosting security

BY DAVID BROWN IN STOCKHOLM

A PROPOSAL which could pave the way to meaningful negotiation on one key detail of disarmament was tabled here by the Soviet Union yesterday at the resumed session of the European Security *Conference*.

The six-point proposal, the first tabled by Moscow since the conference opened last January, showed some movement on the need to expand the mutual motivation of military exercises and troop movements by the Warsaw Pact and by Nato. However, while *Western* diplomats greeted the move as a positive step, they cautioned against optimism that it could lead to speedy progress.

The rest of the Soviet package reiterated now familiar demands for the negotiation of a non-aggression pact between the two blocs, as well as declarations on the non-first use of nuclear weapons, a ban on chemical weapons and a reduction in military budgets.

The Nato governments represented at Stockholm maintain that the 35-nation conference is not the place for such "declaratory" measures. They have already tabled detailed proposals concerned with improving the security climate in Europe, principally designed to lessen the likelihood of surprise attack.

Yesterday, Mr James Goodby, the U.S. delegate, said that the U.S. and its allies would only be prepared to discuss a non-aggression treaty in the context of such "serious" confidence-building measures.

However, one Western diplomat said that the tabling of the Soviet proposal now showed that there was some overlap between the positions of the two blocs. The long process of trying to match them in negotiation should now begin, he said.

AP adds fro mThe Hague—Mr Jan van Houwelingen, the Dutch Deputy Defence *Minister, left* yesterday for a 10-day visit to Washington, where he will plead for a more equitable balance in the sales of sophisticated weaponry between the U.S. and its European allies.

As chairman of the Independent European Programme *Group (IEPG), made up of all* European Nato member countries as well as France, Mr van Houwelingen is scheduled to have talks with members of Congress and officials of the Departments of State and Defence.

The IEPG, founded in 1976, is promoting more co-operation among European Nato countries on weapons development.

The U.S. currently sells two to three times as much weaponry to its Nato counterparts as European members of the alliance sell to America, an IEPG official said.

Italian banks association urges cut in prime rate

BY JAMES BUXTON IN ROME

THE Italian bankers' association (ABI) yesterday called on banks to lower their prime lending rate following last Friday's cut of 0.5 per cent in the Bank of Italy's official discount rate.

The discount rate was reduced by half a point to 15.5 per cent in a move which reflected the lowered Italian inflation rate but was not intended to signify any relaxation of the central bank's *policy of limiting monetary* expansion.

ABI no longer seeks the agreement in advance of its member banks on an indicative prime rate, but, having urged a policy, waits for the banks to set their individual rates before fixing an official ABI rate, which is still indicative rather than compulsory.

Yesterday, the asssociation's governing council agreed that there should be a drop in prime rates from the 17.5 per cent set at the end of March. This drop is likely to be in line with the 0.5 per cent cut in the discount rate.

Sig Giannino Parravicini, the ABI chairman, said yesterday that both inflation and the rate at *which the Government* is selling its Treasury bills have fallen, though the government deficit remains very high. Inflation last month dropped below 12 per cent to 11.6 per cent for the first time since 1978.

Belgium to float BFr 100bn special loan

By Our Brussels Staff

THE BELGIUM Government is floating a special Treasury loan for BFr 100bn (£1.28bn). It has reached an agreement with the commercial banks to convert their short-term paper into a medium-term loan split into two parts, the Ministry of Finance said yesterday.

The first part, covering three-quarters of the total, carries an *interest rate of* 12.25 per cent over three years; the second part, also for three years, carries a floating rate worked out on the average interest rate of three-month certificates for the previous year.

The aim is to reduce the *Government's financing* charges which this year are expected to be particularly high asthe first interest payments are made on large loans floated last year.

● The Belgo-Luxembourg Economic Union (BLEU) sharply reduced its balance of payments deficit last year as merchandise exports increased and import costs were held back. The deficit came back to BFr 42.6bn (£56m) from BFr 116.1bn in 1982, the Ministry of Finance announced in Brussels.

The deficit on goods trade alone was reduced to BFr 27.1bn from BFr 87.2bn.

The BLEU had a surplus on invisibles of BFr 39.5bn, some BFr 11.5bn more than in the previous year.

The improvement in the balance of payments follows government measures to help Belgium companies regain their competitiveness, notably through policies of wage moderation. There has been a recent return to competitive levels of the early 1970s, after a period when Belgian companies were being aggressively priced out of the market.

Gas pipeline delayed

STATOIL, Norway's state oil company, has run into more trouble in laying a gas-gathering line in its sector of the *North Sea, Fay Gjester* reports from Oslo. Last month work was delayed for a week while divers blew up World War 1 mines. This week, storms ruptured the line south of the Heimdal gasfield, flooding a 90 km section.

DUTCH PACT ADDS PRESSURE FOR MORE LIBERAL EEC RULES

UK steps up air transport campaign

BY PAUL CHEESERIGHT IN BRUSSELS

THE BRITISH Government is intending to use a new agreement with the Netherlands as a means of putting pressure on other EEC countries for more liberal air transport regulations.

The Netherlands agreement, which is not yet settled in detail, would bring to an end the pool arrangement between *British Airways and KLM*, opening the way for new carriers on Anglo-Dutch routes and hence an increase in competition. The effect would tend to be lower fares.

If the agreement is settled in time, Mr Nicholas Ridley, the Minister of Transport, will announce it to his EEC colleagues at a Council of Ministers in Brussels tomorrow.

This meeting will be the first occasion on which ministers will discuss proposals from the European Commission for increasing the flexibility of pool*ing arrangements* worked *out* on a bilateral basis and bringing the airlines under the wing of the EEC's competition rules.

Although the UK Government considers these proposals useful, it feels they do not go far enough. The Anglo-Dutch agreement is seen as a means *of demonstrating to other* governments that such liberalisation can benefit travellers without wounding airlines.

From the Commission point of view the Anglo-Dutch approach is useful because its puts extra pressure on governments like Italy's which are reluctant to see any change in the air transport regime.

But the British approach of seeking change by showing an *example is seen as of limited* application. Apart from Luxembourg, there is no other government in the EEC which would be prepared to enter an agreement on the lines pioneered in the Dutch negotiations.

The British Government's *drive for a more liberal air* policy is presently concentrated on diplomacy, but despite the visits of Mr David Mitchell, the Under-Secretary for Transport, to other EEC capitals, spreading the gospel, the Government has not thought it sufficiently worthwhile to present any of them with specific proposals.

If the diplomatic approach fails—and it is considered likely to succeed only over a *long period—then* the UK could have recourse to the European Court of Justice to compel a legal solution. But for the moment this is not being actively considered in Whitehall.

The Court approach has already been adopted by the *European Parliament*, which has taken action against the Council of Ministers for not honouring the obligation in the Treaty of Rome to create a common transport policy.

Law to be enforced against insurance curbs

BY CHRISTIAN TYLER, TRADE EDITOR

THE EEC Commission will take legal action against member-states that continue to block free trade in non-life insurance services, a Brussels official said yesterday.

Mr Bus Henriksen, director-general of the Commission's financial institutions and taxation division, said the Treaty of Rome would have to be enforced through the European Court of Justice if Common Market ministers failed to approve more directives that give effect to the treaty.

"If we have a clear-cut case, we will run that case," he told a seminar in London organised by the Kangaroo Group ,an international lobby of Euro-*MPs* campaigning for a free internal market.

Mr Henriksen admitted that legal process was a second-best solution, if only because member-states could devise new barriers to by-pass judgments of the court.

The Commission *has already* launched cases against France and Denmark to outlaw their national barriers against foreign insurance companies. The suits are part of a campaign to bolster a 1978 directive to widen the market in co-insurance of major risks.

Mr Paul Channon, the UK *Trade Minister, told the* conference that Britain was supporting the Commission's campaign, but found itself "very much in the minority in Brussels."

There were already common standards for the supervision of insurance companies in the *EEC, and theoretically there* was freedom of establishment. But national controls stood in the way of a *genuinely* free market.

"We are not proposing immunity from the law, but merely that the authorities should step in only if and when there are problems," he said. "Some of the arguments confuse protection of the policyholder with protection of the insurer from outside competition."

Earlier, Mr Henriksen said liberalisation of financial services within the EEC could be greatly assisted by the increasing popularity of the European Currency Unit (Ecu) as a medium for transactions.

Its use as a currency in its *own right* was "snowballing," and the next step would be to set up a clearing system so that eventually intra-EEC trade could be invoiced in Ecus.

Brussels refutes Greek claims of trade crisis

BY ANDRIANA IERODIACONOU IN ATHENS

THE EUROPEAN Commission says that Greece's accession to the EEC has not caused the crisis in the country's foreign trade which is claimed by *government economists in* Athens. For the past two years, those economists have been arguing that accession has made worse Greece's trade balance with EEC countries, and badly undermined the weak manufacturing sector by flooding the domestic market with Com*munity imports*.

A commission report, published here yesterday, concedes that the country's agricultural trade performance suffered following accession. But, otherwise, it says, "nothing particularly disturbing has happened to trade between Greece and the other members of the EEC."

Imports of manufactured goods from the Community rose by 5 per cent in 1981, then fell *by 2 per cent in 1982* and by 6 per cent in the first ten months of 1983. Greek exports to the EEC which tumbled by 17 per cent in 1981, rose by 3 per cent in 1982 and 1 per cent in the first ten months of last year.

The report shows that an *agricultural trade surplus of* Ecu 128m (£75m) in favour of Greece in 1980 was transformed into a deficit of Ecu 157m when the country joined the Community. This widened to Ecu 287m in 1982, but fell to roughly Ecu 157m in 1983.

Lome states offered talks on issues outside pact

BY IVO DAWNAY IN BRUSSELS

EEC DEVELOPMENT ministers have offered talks on a series of issues outside the bounds of the Lome trade and aid convention to their African, Caribbean *and Pacific (ACP) partners in* return for tighter controls on how funds are spent.

However, M Edgard Pisani, the Community's development commissioner, said yesterday that last week's ministerial talks in Fiji had failed to calm ACP disquiet over EEC efforts *to influence the direction of* development programmes. He reported, nevertheless, that both sides still believe the broad outlines of a deal can be reached when talks resume in Luxembourg next month.

This would clear the path to a third five-year Lome pact.

Some progress was made last week on a number of controversial issues which could be resolved outside the main Lome package.

These include an agreement to examine ACP complaints over the EEC's interpretation of the convention, the treatment of students and migrant workers in Europe, and the implications of the accession of Spain and Portugal to the Community.

*There remain marked differ*ences, however, over ACP calls for tariff-free access to the Community market and EEC demands that support funding for primary commodities are confined to developing these sectors

W. German orders down 4% in March

By James Buchan in Bonn

WEST GERMAN manufacturing industry's orders took an un*expectedly sharp dive-in March*, amounting to a 4 per cent drop on February in terms adjusted for the season and inflation.

Bonn officials, while *surprised* by the figures, said however, that a more reliable comparison by quarter suggested *that* the trend was still upwards, with a 2 per cent real and seasonally adjusted increase in the first three months of this year over the last three of 1983.

The Federation of German Industry warned this week that the year-long improvement in investment would *be* sharply affected by a strike in the engineering industry which seems bound to begin next week.

However, the well-known and respected *survey of business* opinion carried out by the Ifo institute of Munich in March showed that companies were expecting demand to dampen down anyway in the course of the year.

The figures issued by the Economics Ministry yesterday *showed that both foreign* and domestic orders in March, as well as industrial production *for the month*, were down by 4 per cent.

IG Metall, the engineering *workers union, yesterday began* a second round of strike ballots in Hesse, the region around *Frankfurt, after achieving an 80* per cent vote in favour of strike action in North Baden-Wuerttemberg on Friday.

Union representatives said they were in no doubt that the ballot in Hesse, which continues today, would show a majority as high for strike action in support of a shorter working week.

Leaders to meet

Chancellor Helmut Kohl and President Francois Mitterrand will meet in Saarbruecken on *May 20 to discuss the EEC's* financial crisis, it was announced here yesterday, Reuter reports from Bonn.

FINANCIAL TIMES, USPS No 190640 published daily except Sundays and holidays. U.S. subscription rates $420.00 per annum. Second class postage paid at New York NY and at additional mailing offices. POSTMASTER: send address changes to: FINANCIAL TIMES, 14 East 60th Street, New York, NY 40022.

EUROPEAN NEWS

Hungary aims to give its managers greater freedom of action

BY DAVID BUCHAN IN BUDAPEST

HUNGARY INTENDS to let workers in most enterprises elect their managing directors, and to permit greater wage differentials to encourage workers to move to better companies and work harder once they are there, Mr Miklos Pulai, deputy chairman of the National Planning Office, said yesterday.

He gave details, in an interview, of last month's Communist party central committee decision on economic reform, in advance of the full communique to be published later this week. He described the decisions as the most important for 18 years. The last time the central committee dealt so thoroughly with economic reform was in 1966, two years before Hungary embarked on its reformist road.

Following the party's reaffirmation of economic reform, Hungary would like to extend its present loan-adjustment programme with the International Monetary Fund beyond the end of this year, Mr Pulai said. But any discussion of this with the IMF would come later this summer.

Only the broad lines of the new changes, which would introduce a large measure of Yugoslav-style self-management (once considered a heresy in the Soviet bloc) over the next two years, have been agreed. But Mr Pulai already detected a danger of the reforms being misunderstood in the West as enhancing the private sector.

Only 3 per cent of Gross Domestic Product, including industry, agriculture and services, was in purely private hands in Hungary, and he stressed that this share would not increase.

He said that supervisory "enterprise councils" would be set up in all industrial companies, except for those related to defence and public services and so-called trusts which have a monopoly in such areas as oil and aluminium.

The councils would be able to approve appointments of directors, decide on investment, wages and prices, and determine production strategy. But the Industry Ministry will keep a reserve veto over directors' appointments and any decision involving liquidation or creation of companies.

Sakharov's wife restricted and accused of slander

MOSCOW — Yelena Bonner, wife of Soviet dissident Andrei Sakharov, has been confined to Gorky by the police, a friend of the family said yesterday. Dr Sakharov himself is on hunger strike.

Ms Irina Kristi, a mathematician, told Western journalists that she had visited their home in Gorky, a city about 250 miles east of Moscow and closed to foreigners, last Sunday and spoke to the couple for three minutes before police detained her.

Dr Sakharov, a Nobel Peace Prize winner, was banished to Gorky in 1980 to stop his human rights campaigning.

Ms Kristi said that Dr Sakharov told her he "will fast until the very end" unless his wife is allowed to leave the country for treatment of an eye condition.

Until now, Mrs Bonner's recent whereabouts were unknown. Other friends said she had been expected in Moscow on May 2, but she failed to appear. The Soviet Press, meanwhile, published one of its harshest attacks on the couple who helped found the Soviet human rights movement in the 1970s.

Since Dr Sakharov was forced into exile, Mrs Bonner has been allowed to travel to Moscow—where she often met Western diplomats and journalists and served as her husband's link to the West.

Now, according to Ms Kristi, police have told her they are investigating her under the slander law, which carries a sentence of up to three years in prison and is often used against dissidents.

In addition to her eye ailment, Mrs Bonner has had two heart attacks.

Agencies

Decision on Polish prisoners likely soon

By Christopher Bobinski in Warsaw

THE CATHOLIC church's efforts in Poland to secure the freedom of the country's most prominent political prisoners have reached their final stage. Talks over the next seven days should clarify whether the authorities are now ready to free the prisoners.

Sr Emilio de Olivares, a senior assistant to the United Nations Secretary General, saw nine of the 11 last week. He told them they would be freed if they agreed to leave Poland for between six and 12 months under a United Nations guarantee that they would be allowed to return.

He failed to see Mr Marian Jurczyk, who is being treated for a heart condition in a clinic, or Mr Adam Michnik, who is refusing to discuss any sort of conditional release.

The Church, meanwhile, is linking the freeing of Poland's other 400 political prisoners, 61 of them already sentenced, to the fate of the 11.

It remains to be seen what kind of guarantees of "good behaviour" the 11 would be ready to sign if their release were accompanied by a general freeing of political detainees by July 22, the fortieth anniversary of the Polish People's Republic.

The 11 who are awaiting trial on charges of anti-state activity and have been in detention since December 1981, have so far resisted promising to desist from political activity in return for their freedom.

It has become clear that the authorities want to avoid a trial which would upset both Western and internal public opinion. And Moscow is believed to be no longer insisting that the 11 be sentenced.

The Government is still hoping to persuade them to emigrate. This would lower their prestige in the eyes of Solidarity's supporters and is one reason why they are refusing to accept.

Sr de Olivares is to return to Poland soon to hear the decision of the 11 on his proposal.

Ghost haunts Sweden's economic boom

BY KEVIN DONE, NORDIC CORRESPONDENT, IN STOCKHOLM

THE SWEDISH Government's economic planning "is like a well-laid table standing on rickety legs," Mr Nils Asling, former Industry Minister from the opposition Centre Party claimed in a recent debate in the Riksdag, the Swedish Parliament.

Laid out for all to see are the bright statistics of the country's strengthening recovery. Exports are booming and the current account has been brought almost into balance – an enormous improvement on the SKr 22.5bn ($2.8bn) deficit run up in 1982, the last of six years rule by the non-Socialist coalition.

Industrial production is expanding robustly and industrial investment after several years of decline is expected to rise by 15 per cent this year according to the Government's latest confident forecast. Profits of many of the big multinational corporations which earn their living overwhelmingly in export markets are at record levels after virtually doubling in 1983.

Even Mr Kjell-Olof Feldt, the Social Democratic Finance Minister who is presiding over the upturn like a stern schoolmaster with some errant pupils has been forced to admit that Swedish industry has shown "a surprising and unexpected vitality and dynamism" since the October, 1982 devaluation.

It was the Social Democrats' lowering of the value of the Swedish krona by 16 per cent that helped to trigger the current export boom giving industry its best level of competitiveness in international markets for more than 10 years.

The feast is being haunted by a ghost, however. The table is wobbling because the Government has failed so far to squeeze inflation down to the levels of the country's major trading partners. If inflation were allowed to run for too much longer at almost double the level of countries such as West Germany and the UK, that precious competitive advantage would quickly be eroded. In March consumer prices were still running at 9 per cent above the level a year earlier.

The Social Democratic administration faces a cruel dilemma. With an election due next year it is clearly keen to trumpet its successes. With the sobering memories still fresh of the second half of the 1970s when high inflation and rocketing costs rapidly priced Swedish goods out of world markets, the Government is aware, however, that the whole edifice could come tumbling down again.

It has set its targets well enough – inflation to be cut to 4 per cent by the end of the year and to 3 per cent by the end of 1985, total wage costs in 1984 not to rise by more than 6 per cent. But it has failed to take the employers and the trade unions along with it.

The two sides of industry have been experimenting this year with a new pattern of bargaining that has broken with the highly centralised national wage talks which have been the rule for much of the post-war period.

Negotiations have been conducted sector by sector, chiefly at the insistence of the employers, who have been seeking greater flexibility and an escape from the "solidarity wage policy" under which a statutory minimum wage is negotiated. This

Finance Minister Feldt: 'like a stern schoolmaster'

policy has been championed by the trade unions.

"You could visualise a smoothly working decentralised pay bargaining system, but what we now have seems to be a rather chaotic and unfortunately quite inflationary system," observes a senior Finance Ministry official.

The private sector has heaped the blame on the state employers for being too lax in their initial negotiations with the public sector unions. Certain clauses in the agreements in the local government sector, which set the pace in this year's wage round, have come under particularly heavy attack for the way they link public sector wages to wage drift in the private sector and to general inflation. This sort of linkage will not have too disastrous an effect in 1984, but it is seen as an inflationary time bomb for 1985 and following years.

In the consequent private sector deals, such as that in the important engineering sector, settlements were reached which could mean wage rises of around 9 per cent. Overall the Finance Ministry estimates that wage costs could rise by at least 7.5 per cent this year. Mr Olof Palme, the Prime Minister, made a last minute plea for moderation to the two sides in the engineering industry, but in vain.

Fearful that this year's wage settlements and the trouble already stored up for 1985 would blow its strategy way off line, the Government moved last month to set a new course. In a series of sweeping measures it introduced a general price freeze to the end of the year, frozen rents and forbade companies to raise dividends for 1984 above the 1983 level.

At the same time it drained several billion krona from the corporate sector and from the local authorities and temporarily sterilised this liquidity in blocked accounts at the central bank in a bid to persuade the employers to hold down local wage settlements.

The moves were bitterly criticised as panic-measures by the opposition and economists claim the package is merely cosmetic. "A price and rent freeze attacks the symptoms, not the causes of inflation," says Mr Olle Lindgren, chief economist at S-E Banken. It has no impact in driving down inflationary expectations, especially in the long-term.

The Government is shirking its responsibility for economic policy. Instead of pursuing policies to reduce inflationary expectations, it is taking measures which pass on responsibility for fighting inflation to the two sides of industry."

The package of emergency measures is designed to provide a cooling-off period for both the unions and the employers. The Government is anxious to see if they can put their own house in order so that it can avoid treading the perilous path towards introducing some form of incomes policy.

Traditionally the Government has stayed outside the collective bargaining process in Sweden. The unions would apparently welcome some government pressure on the employers to bring a return to centralised wage negotiating practices, but they would be up in arms at any formal state incomes policy.

The next test will come on June 6 when the unions and employers report back to Mr Palme and Mr Feldt about progress in reaching a new accord on forms and conditions for more moderate wage bargaining for 1985. The Government has made clear that the threat of state intervention is waiting just round the corner, but it is desperately anxious not to have to act.

There are doubts too about its eventual resolution. "In early 1985 the economy will look very bright with high profits, rising demand for labour and a very low external deficit, if any. Not a very good background for halving the customary wage increases," says Mr Nils Lundgren, chief economist at PKbanken. "The Government will have to do something. But then again, 1985 is an election year."

Juan Carlos to visit Moscow—a trip rich in ironies

BY TOM BURNS IN MADRID

SANDWICHED BETWEEN a reception for ambassadors accredited to the Kremlin and an evening at the Bolshoi to see "Swan Lake," King Juan Carlos and Queen Sofia have an hour or so set aside for a meeting with the Spanish colony in Moscow.

There is more than a passing irony in the fact that the Republican "Civil War children" who were taken by their thousands to Moscow during the 1936-39 Spanish Confederation will be hosted in their country of exile by the restored Spanish monarchy.

The six-day visit to the Soviet Union that King Juan Carlos begins tomorrow is rich in ironies. There is, for example, the case of the Soviet-backed Partido Comunista, the dissident splinter group of the mainstream Spanish Communist Party, which held its constituent congress this year with an avowedly Republican platform.

Another is that the king starts his visit just as Prime Minister Felipe Gonzalez winds up a trip to Denmark in which he has made the most forthright statements to date on his Government's favourable view of the Nato alliance.

Spanish officials stress that the royal trip will skate round any controversies and make no attempt to break diplomatic ground. The itinerary takes in Leningrad, Tashkent and Samarkand, with visits to local markets, monasteries and museums as well as receptions.

Stressing the "normality" of the visit, Madrid officials say the only element that caused some concern during its preparations was the possible criticism it might prompt in hardline Spanish right-wing circles. In the event, this has not materialised.

Despite such protestations there is no escaping the significance that King Juan Carlos is not only the first Spanish head of state to visit the Soviet Union but also only the second Western head of state, after the Finnish President, to be received by Mr Konstantin Chernenko, the new Soviet leader.

Sr Fernando Moran, the Foreign Minister, who will accompany the monarch, has bilateral talks scheduled with his counterpart, Mr Andrei Gromyko. High on their agenda will be detente in general and the Stockholm disarmament conference in particular.

Although Spanish-Soviet relations, formally restored in 1977, are low-keyed both politically and economically, there has been a heightened and at times intense contact in a multilateral context as a result of Madrid's hosting of the European Security and Co-operation Conference which ended last year. The final compromise Madrid document between the East and West blocs last September owed much to Sr Moran's diplomacy.

AMERICAN NEWS

Violence surrounds counting of Panama general election vote

BY DAVID GARDNER IN PANAMA CITY

PANAMA was facing the prospect of serious political violence yesterday after an outbreak of fighting on Monday night around the Parliament building where the counting of the vote from Sunday's general election has begun.

At least one person was killed —unconfirmed reports put the death toll at four—and 43 were injured after a heavily-armed squad from the ruling Revolutionary Democratic Party (PRD) fired on a 3,000-strong crowd of opposition demonstrators.

The outcome of this bitterly-contested election, in which both the main opposition coalition, led by Dr Arnulfo Arias, and the regime-backed candidate Sr Nicolas Ardito Barletta are claiming victory, must now be in doubt.

An emergency Cabinet meeting was held yesterday morning and Dr Arias' supporters called for a demonstration yesterday afternoon, to protest against intimidation and alleged fraud.

Panama's image as a haven of stability in central America and close to the largest offshore banking centres in the Americas is also clearly at risk if the violence and uncertainty continue.

Sunday's poll was the first democratic election since Dr Arias was deposed by the military for the third time in 1968.

Monday night's fighting appeared to witnesses to be a deliberate provocation by a sector of the PRD. Gunmen, armed with Ingrams machine pistols, pump-action shot guns and pistols were wearing PRD colours and caps, identifying some of them as members of the party's so-called special commando unit. They went unchallenged by the 50-national Guardsmen in the parliament building during the three hours of fighting.

One of the ringleaders, who entered the counting area with a machine-gun shouting "Nicky Barletta is President" was identified to journalists by a National Guardsman as a member of the security forces.

Scrutineers and journalists were trapped in the building, which a dozen PRD gunmen entered and left at will while they took control over the area. Less serious armed confrontation broke out in other areas of the city.

Sr Barletta, a former World Bank vice-president, told journalists in the early hours of Monday morning that Panama could not stand further delay in announcing the election results. But asked what his PRD-led coalition reaction would be if Dr Arias brought out 30,000 of his supporters on to the streets, he replied: "Then we'll bring out 40,000."

Independent observers and diplomats here now question whether the 16-year-old military-backed regime is willing to concede to Dr Arias, an 83-year-old Right-wing populist, the victory most of them believe him to have won.

AP adds: A group of armed men in civilian clothing seized the cameras from two news photographers, including a photographer for the Associated Press waiting for the result, and smashed them to the ground as police watched and refused to intervene.

Nicaragua asks France for help to clear mines

By Tim Coone in Mangagua and Hugh O'Shaughnessy in London

NICARAGUA has made a formal request to France for aid to clear mines from Nicaraguan waters. A CIA-sponsored mining operation caused damage to five foreign ships at the ports of Corinto and Puerto Sandino in March and a fishing vessel was sunk at Corinto at the beginning of this month. M Claude Cheysson, the French foreign minister, last month expressed French willingness to help clear the mines.

The Nicaraguan request was made to M Regis Debray, special adviser to President Mitterrand, who is on an official visit to Managua.

Nicaragua made a parallel appeal yesterday for international help to clear the mines.

In a letter to Mr C. P. Srivastava, executive director of the London-based International Maritime Organisation, Father Miguel d'Escoto, the Nicaraguan Foreign Minister, yesterday called for aid "in order to safeguard security, life and property."

In International Court of Justice in The Hague a ruling is expected to be given tomorrow on the Nicaraguan case against the U.S. Government for its support of anti-government insurgents, the Contras."

The court has yet to decide whether to accept the U.S. announcement, published last month, that it would disregard any judgement of the court on a Central American subject. When the U.S. Government first accepted the court's jurisdiction it committed itself to give six months' notice of any withdrawal of co-operation from the court.

The case is further complicated by what seems to have been an omission on the part of successive Nicaraguan governments to deposit at the court ratification of Nicaragua's willingness to be bound by the court's jurisdiction.

Meanwhile, Nicaragua has obtained new credit lines for 1984 valued at $241m (£172m) according to the Ministry of Foreign Trade. The biggest has been agreed with the Soviet Union for $200m, followed by Cuba at $20m and Bulgaria $9m.

Canada signs last batch of east coast drilling deals

BY BERNARD SIMON IN TORONTO

THE CANADIAN Government has signed the final batch of agreements with companies for oil and gas exploration off the east coast. The latest agreements involve the drilling of up to 14 wells off the coast of Nova Scotia, bringing the total for the area to 33.

If the full exploration programme goes ahead, the new agreements will involve spending of C$700m ($540m) over the next four years. The total investment in exploration work off the Nova Scotia coast could reach C$2.4bn.

The main beneficiaries of the new agreements are Mobil Oil (five wells), PetroCanada Exploration and Husky Oil. The future of the east coast oilfields remains uncertain.

Exploration work has so far centred on the Hibernia area, 100 miles off Newfoundland, and waters south-east of Nova Scotia around Sable Island.

Robert Graham profiles El Salvador's probable poll victor

Duarte: little room for manoeuvre

DURING the presidential election campaign in El Salvador, a foreign journalist asked Jose Napoleon Duarte why he was called Napoleon. Having answered a string of questions with confidence, even arrogance, he was suddenly flummoxed.

Yet even if he did not know why Napoleon was his second name, it is apposite for his puffed-up chest, occasionally imperial manner, and steely ambition. All along, he predicted he would win both rounds of the presidential election, and was quick to claim his own victory after the run-off on Sunday.

His adversaries said this was yet another instance of his boundless ego. More likely, it was cold calculation: he wanted to present the electoral council with a fait accompli to guard against fraud. Sr Duarte has a long memory of the fraud that robbed him of a rightful victory in the presidential elections in 1972.

Not only was he denied electoral victory, but in the military takeover that followed, he was arrested, tortured and exiled to Venezuela.

The taut skin on his face stems from plastic surgery to his injuries. He also has the joint of the three inner index fingers of his left hand missing — legend has it that this was the result of torture but he insists it occurred on a building site while exiled in Venezuela.

Born in November 1925, Sr Duarte epitomises the middle class that has grown up in the past 30 years round San Salvador. His father was a poor tailor from Chalatenango province in the north, who prospered with a small sweet manufacturing business when he sought his fortune in the capital.

He managed to send his two sons to Notre Dame College in the U.S., where Jose Napoleon studied civil engineering. Armed with his degree, he married the girl next door, the daughter of a contractor with whom he formed a company that went on to build many of the modern sites of San Salvador—including the Central Bank.

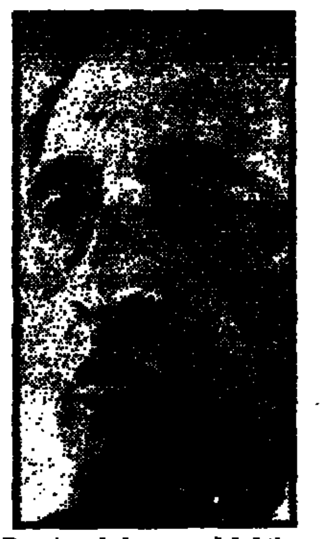
He formed the Christian Democrat party in 1962 with eight others, and became a force in local politics, winning the mayorship of San Salvador.

Sr Duarte's subsequent political track record has been ambiguous. Allowed to return from exile in 1979, he was behind the populist programme of the military-led government that included land reform and nationalisation of the banks. But he quarrelled with his own allies—several of whom, like Sr Guillermo Ungo, went to join the guerrillas—and was powerless to stop the civil war gathering momentum.

The worst human rights abuses occurred when he was pushed into the presidency by the military from 1980 to 1982. He stepped down from the non-elected presidency in 1982 only after the Christian Democrats lost out in elections to the National Assembly.

If confirmed in his victory, Sr Duarte has little room for manoeuvre. The right, whose candidate, Major Roberto d'Aubuisson, polled 45 per cent of the vote, believed him to be a Communist. The U.S. Administration regards him as a respectable tool with which to raise the level of economic and military assistance to fight against the guerrillas. The guerrillas see him as a U.S. puppet, pointing out that he was only allowed to return from exile as a "democratic" option when the Americans became alarmed by the left wing Sandinista victory in Nicaragua.

His constituency of voters has so far proved powerless to influence events in El Salvador. Their vote was one of hope that he can end the four-year civil war. This week, for the first time, he has been forthright in pledging to end the fighting. But he can only do this with support from the U.S. and the military who are wary of another pledge — to purge corrupt officers and those associated with the right-wing death squads.



Duarte: pledge to end fighting

IMF says interest rate cut vital

BY STEWART FLEMING IN WASHINGTON

DEBT-RIDDEN Third World countries can achieve adequate rates of growth and a manageable debt-service burden by 1990, provided certain key assumptions, including a 3 percentage point decline in nominal interest rates on floating-rate loans, fall into place.

The conclusion is drawn by the International Monetary Fund in an extensive analysis of the Third World debt crisis in its World Economic Outlook released today.

Alongside a fall in interest rates, it says that a sustained real rate of economic growth of 3½ per cent in the industrial world from 1985-90, no increase in protectionism and no decline in the real level of exposure of commercial banks to Third World borrowers are also critical variables in the manageability of the debt crisis.

The IMF's estimate is based on a forecasting exercise which included, apart from this "base scenario," alternative outlooks labelled "crisis" and "pessimistic" scenarios.

A key point which the IMF arrives at is that the favourable outcome in the "base scenario" is very sensitive to these key assumptions.

"Serious divergences" in one or more of the crucial variables "would jeopardise the attempts of many developing countries to re-establish manageable external debt positions and simultaneously sustain adequate rate of growth of output."

Separately, the IMF estimates that the total external debt of non-oil, less-developed countries rose to $669bn (£477bn) by the end of 1983—a five-fold increase since 1973. It projects a rise to $711bn by the end of this year.

Call for loan insurance scheme

BY PETER MONTAGNON, EUROMARKETS CORRESPONDENT

AN INSURANCE scheme that protected lenders against loss of interest and principal could help encourage banks to continue lending to developing countries, according to Mr Henry Wallich, a Governor of the Federal Reserve Board.

In a paper prepared for the Group of Thirty private consultative group on international economic and monetary affairs, Mr Wallich argues that such a scheme could be developed at relatively low cost and funded largely by contributions from the banks themselves.

The scheme would cover a participating bank's entire portfolio of loans to less developed countries but actual loss payments would be restricted to a fraction of the total portfolio. This fraction could be very small—say 2 per cent—because experience has shown that the ratio of losses to total international lending at U.S. banks has been historically low. In 1982 it was only 0.3 per cent, Mr Wallich says.

Outside funding, for example, from the U.S. Export-Import Bank or the UK Export Credit Guarantee Department, could be sought initially to boost the credibility of the scheme, but this should not be a permanent feature, Mr Wallich says.

Mr Wallich noted that there exist several precedents for insurance schemes in the financial world. Among others he noted the Federal Deposit Insurance Corporation and the Federal Savings and Loan Insurance Corporation in the U.S.

Hart hopes for revival of campaign in Ohio, Indiana

BY REGINALD DALE, U.S. EDITOR, IN WASHINGTON

SENATOR Gary Hart was pinning hopes for a last-minute revival of his struggling presidential campaign on voters in Ohio and Indiana, who went to the polls in state primaries yesterday. The Hart campaign appeared to have virtually given up hope of carrying the two other states voting yesterday, Maryland and North Carolina.

Mr Hart received a small boost from voters in his home state of Colorado, who gave him 87 per cent support in Monday's caucuses, according to nearly complete returns. But his Colorado victory had been taken for granted, and had little political impact.

Former vice-president Walter Mondale was hoping for a clean sweep of all four states, which will elect 368 delegates to July's 3,933-member party convention in San Francisco. A grand-slam victory would put him in reach of the 1,967 delegates needed to win the nomination and put mounting political pressure on Mr Hart to bow out gracefully.

Mr Mondale remained nervous about his prospects in Ohio, where the latest polls put him ahead of Mr Hart by margins of only 3 to 8 percentage points. Mr Hart was thought to be best placed in neighbouring Indiana, where Republicans and independents, who have backed him in other states, were entitled to vote.

Mr Hart also badly needed a victory to boost his campaign finances. Campaign officials said yesterday that debts had now reached $4.5m and receipts in April, at $1.5m, had been only half those in March.

Both Mr Hart and the Rev Jesse Jackson, the third remaining candidate, brushed aside suggestions from the party leadership in recent days that they should start trying to settle their differences with Mr Mondale. Mr Jackson indicated that he would put off any "unity" negotiations with his rivals until after the final primaries on June 5.

Mr Hart said that "unity works in all directions." If anyone was to offer olive branches, it should be Mr Mondale, "given the negative campaign he has run," he said.

Mr Hart fears that by joining discussions on unity he would be seen as tacitly accepting that Mr Mondale now has the nomination within his grasp. Mr Jackson fears he would undermine his negotiating position at the convention if he gives way too early on his demands for changes in party rules and policies.

OVERSEAS NEWS

Short-term prospects for South African economy 'poor'

BY OUR JOHANNESBURG CORRESPONDENT

SHORT-TERM prospects for the South African economy are poor and a sustainable recovery depends on improved balance of payments, according to the Standard Bank review for May published yesterday.

The review cites "two major short-term problems"—balance of payments and inadequate monetary controls.

The last 12 months, says the bank, has seen an increase in the pace of imports "which defies belief: in March 1984 the country's merchandise imports were more than 60 per cent higher" than in the same month of 1983.

Export performance was mixed while the price of gold stayed below $400 (£289) with little prospect of improvement.

As a result, the bank continues, the country's current account performance is "unsatisfactory" and the deficit for 1984 may reach R2,500m (£1,420m).

Substantial short- and long-term offshore borrowing over the last three years has, says the bank, pushed up South Africa's indebtedness to levels which must be carefully checked "for reasons of prudence and maintaining international creditworthiness."

The bank concludes that the overall balance of payments position is delicate and needs to be improved "before a really sustainable recovery can get under way."

The second major problem, the bank review goes on, is the "unhealthy performance of monetary variables over the last year." Despite the reserve bank's high interest rate policy since mid-1983, credit demand has remained strong in the first part of this year. Commercial bank discounts and advances, excluding those to the Land Bank, were 33.5 per cent up on the level a year ago.

Two "equally unpalatable prospects now loom increasingly large," the review warns.

If the Government's objective is to create a sound base for lasting growth, it says, a meaningful revival of domestically orientated demand and activity cannot take place until the second or even the third quarter of 1985.

Alternatively, says the bank, if progressive improvements in the performance of exports are allowed to filter through to the domestic economy and the financial markets, or if financial discipline is relaxed, a recovery could materialise more rapidly.

But, says the bank, "it would be extremely unsoundly based in terms of the balance of payments and inflation base levels."

Editorial comment, Page 18

Rebels step up attacks inside Mozambique

BY OUR FOREIGN STAFF

ANTI-GOVERNMENT rebels in Mozambique have stepped up their attacks within the country since the signing of a non-aggression pact between Maputo and Pretoria designed to remove South African support for them, Mr Jose Luis Cabaco, Mozambique's Information Minister, said in London yesterday.

More than 1,000 fighters belonging to the Mozambique National Resistance (MNR) were believed to have infiltrated into the country, well-equipped with arms and food, before the signing of the agreement with South Africa in March, he declared.

Guerrilla activity was concentrated in the south, where the capital is sited, but is also strong in the northern province of Nampula, the capital of which is Mozambique's third largest town, reflecting government successes against them further south.

Under the non-aggression pact, Pretoria has undertaken to cease support for the MNR in return for an end to military activities in Mozambique by the African National Congress (ANC), the banned black opposition group in South Africa.

● The British Government expects 16 Britons held hostage by anti-Government Unita guerrillas in Angola to be freed and flown home early next week, it said in London.

Poll backs Marcos candidates

By Chris Sherwell in Manila

AN INDEPENDENT public opinion poll presented ahead of next Monday's national assembly election in the Philippines has lent support to forecasts of a clear victory for candidates backed by President Ferdinand Marcos.

The elections, the first since the lifting of martial law in 1981, are widely regarded as a test of popular support for the President, even though his office is not up for election. The Philippines leader has ruled the country since 1965.

Analysts agree that President Marcos's Kilusang Bagong Lipunan (New Society Movement) Party will take the bulk of the 183 seats being contested, despite the opposition to his rule expressed since the assassination last August of Mr Benigno Aquino, the opposition leader.

The public opinion poll, unique in the present campaign, covered a cross-section of 2,000 voters throughout the country, and was conducted by the Development Academy of the Philippines. The poll was sponsored by the Bishops-Businessmen's Conference, an independent body.

The result showed the balance of opinion in favour of President Marcos everywhere, and a preference for Marco - backed candidates.

But a major weakness of the survey was the failure to question further those respondents who were undecided or not volunteering their opinions.

The clearest — and for President Marcos most damaging—finding of the poll was that 16 per cent of voters—70 per cent in the vast Metro-Manila conurbation—were against his decree-making power, which allows him to by-pass the Assembly in legislative matters.

The poll also indicated that the unemployment rate in the Philippines is far higher than the official 5.6 per cent. It concluded from questions about respondents' occupations that the true rate is well above 20 per cent and higher than 25 per cent in Metro-Manila.

This is regarded as a serious reflection on the depth of the economic crisis the Philippines is now facing.

Quentin Peel reports on the effects of a tough Budget after a currency changeover

Nigeria prepares for austerity and compromise

THE COMBINATION of Nigeria's latest austerity budget and the issue of a limited quantity of new bank notes could result in a sharp reduction in the level of economic activity in the country, according to first business estimates.

The two-week changeover to new currency notes, intended to hit black-marketeers and hoarders holding more than N5,000 (£4,630) each, has actually reduced the total amount in circulation by anything up to 50 per cent, according to some calculations.

The exercise ended on Sunday night, 24 hours before the Budget announced by Major-General Muhammadu Buhari, the head of the new military régime, setting out large real cuts in government spending, limits on bank lending and an increase in base interest rates.

However, the N10.1bn (£9.35bn) budget still includes a substantial deficit, requiring borrowing of nearly N3.3bn (£3bn) from both domestic and foreign sources, which could fuel the inflation rate well beyond the official target of 25 per cent.

Traders and large companies in Nigeria are still working out the effects of a wide-ranging overhaul of import duties and tariffs, described by Dr Onaolapo Soleye, the Minister of Finance, yesterday as a "rationalisation and reduction of the range of import duties." But they welcomed an assurance that the new rates will be maintained for at least three years and the abolition of a compulsory advance deposit scheme for most imports.

The new import duties range from 5 to 200 per cent, instead of from 0 to 500 per cent previously, while the number of exemptions has been reduced.

The other major innovations in the budget is a big increase in the number of goods subject to excise duty, from 68 to 400 items, as part of an effort to widen the Government's tax base beyond the oil industry. Non-oil revenues amount to 32 per cent of Government income in the new budget compared with a traditional level of only 15 per cent.

Among the items now subject to excise duty are buses, trucks and vans, building bricks, industrial taps, cocks and valves and many others yet to be announced.

General Buhari warned in his budget broadcast on Monday night that the net effect could be to cause further price increases and shortages of some goods, while wage rates are to be frozen for the rest of the year.

However, Dr Soleye said he hoped that the inflation rate would be kept within 25 per cent in 1984, in spite of the fact that unofficial estimates already put it at between 50 and 100 per cent.

One factor in his favour is that the change in bank notes has already had a dramatic effect in damping down demand and reducing prices, at least in uncontrolled areas like the markets. Banks were closed yesterday for a second day, as they attempted to reconcile their books after two weeks of hectic activity.

In the end, the banks were forced to ration supplies to a maximum of N500 per person because of the shortages, with a promise to pay the balance after the Sunday deadline expired. But the combination of inadequate supplies and hoarders being forced to abandon and even destroy large cash stocks, has undoubtedly reduced overall money supply, at least in the short term.

The latest economic measures will be the subject of the Nigerian Government's negotiations with officials from the International Monetary Fund who arrived in Lagos yesterday. However, the budget made no mention of a possible devaluation of the naira, which the IMF is seeking, nor of any reduction in the large government subsidies on petroleum products.

At a press conference yesterday, Dr Soleye nonetheless expressed the hope that some compromise would be reached which could result in Nigeria obtaining an extended credit of up to $3.2bn from the Fund. He said that the negotiations should by definition involve some compromise from both sides.

Japan's defence 'behind schedule'

BY JUREK MARTIN IN TOKYO

JAPAN officially recognised yesterday that its programme to improve national defence, drawn up in 1976, has fallen three years behind schedule.

Mr Noburo Takeshita, the Minister of Finance, also pointedly reminded Mr Yuko Kurihara, head of the Defence Agency, that any plan drawn up by the military to enhance defence capabilities was in no way binding on the Government.

Mr Kurihara had told a meeting yesterday of the National Defence Council, the governmental umbrella body, that in drawing up procurement estimates for the 1986-90 period his agency would not feel bound by the official Cabinet directive that defence spending be limited to 1 per cent of gross national product.

Defence outlays is just below this figure, though it is widely assumed that if the pending pay increase for military personnel, due to be announced within the next two months, is much over 1 per cent then the ceiling will be breached.

The bureaucratic exchange between the two Cabinet ministers is probably more significant for its timing than its substance. It occurred as two senior U.S. officials, Vice-President George Bush, who arrived yesterday, and Defence Secretary Caspar Weinberger, due tomorrow, prepared to engage Japan in a wide variety of trade, financial and, in Mr Weinberger's case, defence negotiations.

There is thus some concern in Japanese government circles that the defence issue might give the U.S. an additional club with which to belabour the Nakasone Government.

Japan's patent hope is that this week's discussions with Mr Bush and with M Gaston Thorn, president of the European Commission, who also arrives here today, should be designed to prepare the ground for next month's London economic summit rather than feature another round of mutual recriminations, such as practised by Mr Donald Regan, the U.S. Treasury Secretary.

In the same vein, Japan is also sending to Washington today as special envoy Mr Susumu Nikaido, recently appointed Number Two to Prime Minister Yasuhiro Nakasone in the ruling Liberal Democratic Party and one of this country's more persuasive politicians.

On his arrival, Mr Bush seemed more intent on placating rather than confronting. "I think that when we tend to concentrate on the trade issues — necessary as they are — we are prone to overlook the forest for the trees," he said, in characterising general bilateral relations as both vital and on a better footing than ever before.

Both Mr Bush and M Thorn are due to have extended sessions with Mr Nakasone, as well as other Japanese Cabinet officials. However, neither U.S. nor EEC officials here anticipate any surprise commercial and financial concessions from Japan this week, unless the talks between U.S. and Japanese financial officials in Hawaii produce surprising dividends.

● Mr Weinberger arrived in Seoul yesterday for a three-day visit aimed at boosting security co-operation between the U.S. and South Korea, Reuter reports. He said on arrival that North Korea posed a military threat to the South but that any aggression would be crushed. In addition to talks with South Korean leaders, including President Chun Doo Hwan, Mr Weinberger will visit some of the 40,000 U.S. troops stationed in the country.

Franjieh rebuffs Gemayel

MR AMIN GEMAYEL, the Lebanese President, yesterday failed to win the backing of Mr Suleiman Franjieh, the former President and the last major political figure opposing the country's new Government of national unity, Reuter reports from Beirut.

Mr Franjieh, a pro-Syrian Maronite Christian who has supported the Moslem opposition, said after meeting President Gemayel that he stood by his demands for the removal of "Israeli agents" from the nine-day-old Cabinet.

As the two men met, gunmen kidnapped a U.S. Protestant clergyman, Pastor Ben Weir, dragging him into an unmarked car. Mr Weir was the fourth American to be kidnapped or to disappear in Beirut's mainly-Moslem sector since its February takeover by Moslem militias.

David Lennon reports from Tel Aviv: Mr David Kimche, Director-General of Israel's Foreign Ministry, said yesterday that he hoped Mr Nabih Berri, the Shi-ite leader who joined the Lebanese Cabinet, would have enough sense not to encourage Moslems in southern Lebanon into conflict with the Israeli Army there. He said that it would be worth Mr Berri's while to co-operate with Israel, which itself was prepared to co-operate.

● A group of Israeli reserve officers, whose leader is a left-wing politician, called yesterday for a special inquiry into the behaviour of Gen Ariel Sharon, the former Defence Minister, over two incidents during the 1982 Israeli invasion of Lebanon in which 40 Israeli soldiers were killed.

India to speed Bangladesh fence

BY JOHN ELLIOTT IN NEW DELHI

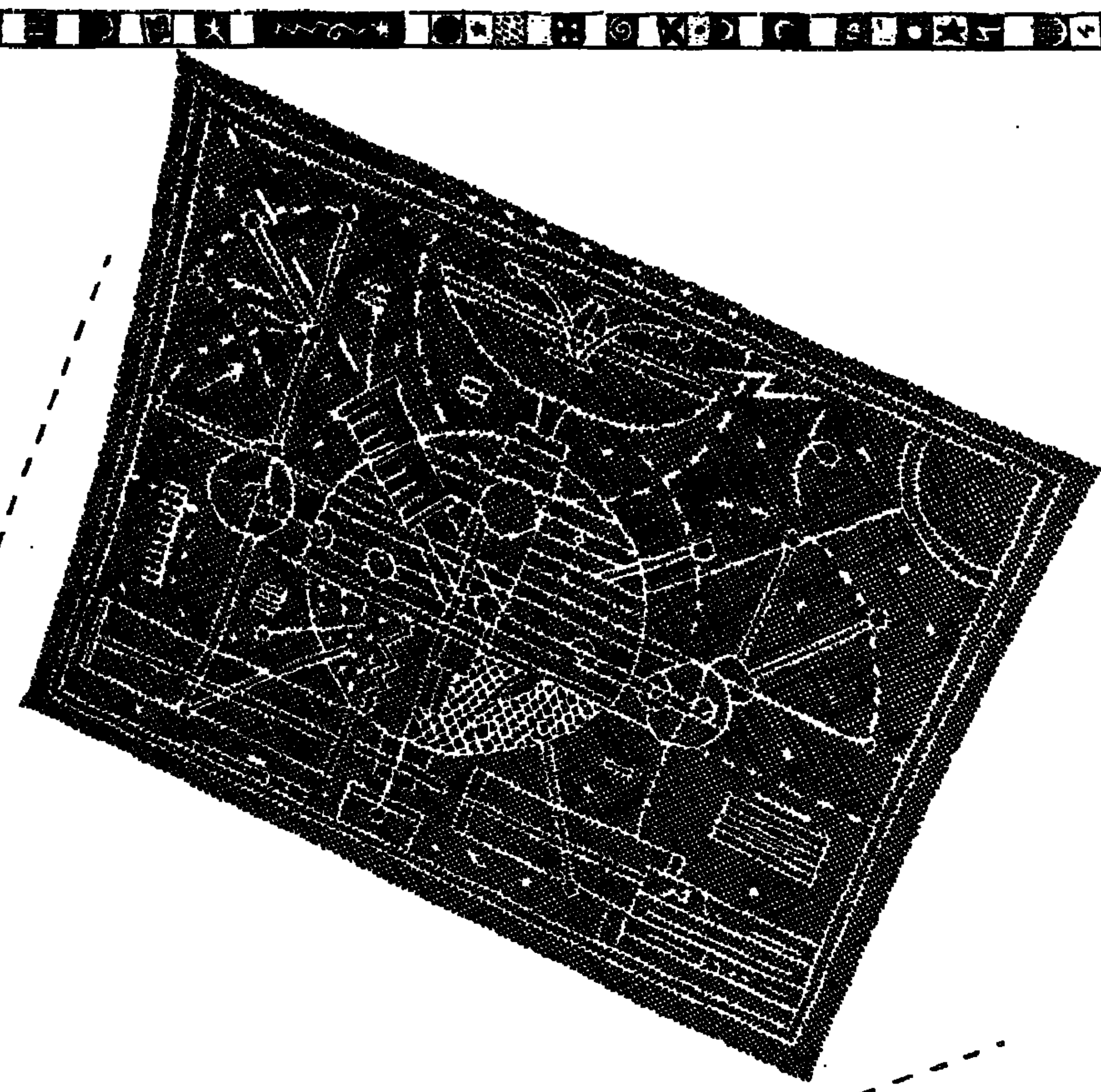
INDIA INTENDS to go ahead with construction of a barbed-wire fence along its border with Bangladesh, despite protests from the Bangladesh Government.

This was confirmed by a Ministry of External Affairs spokesman in Delhi last night, after talks had taken place between senior officers of the two countries' border forces.

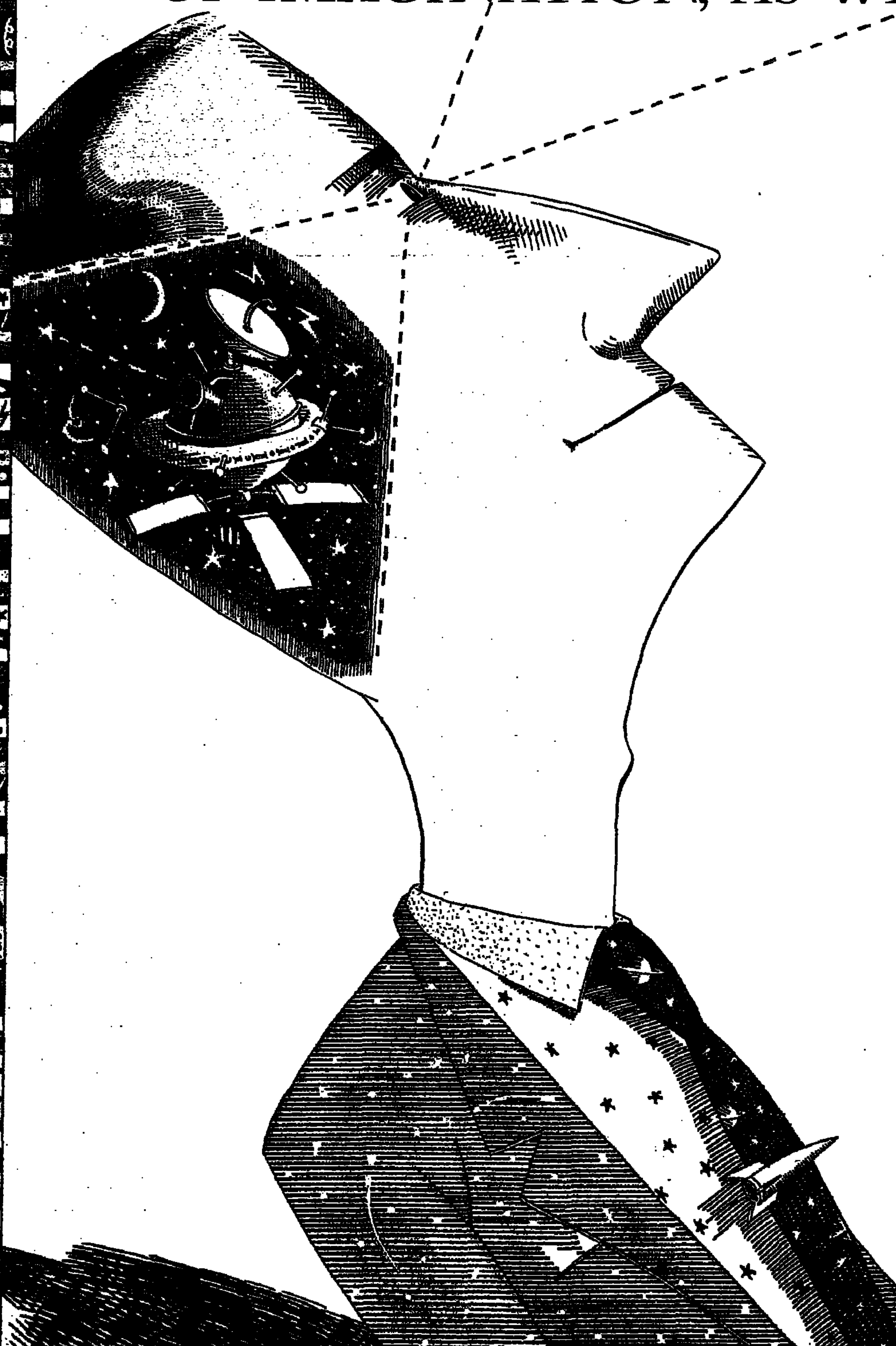
The spokesman denied reports from Dhaka, capital of Bangladesh, that India had agreed to suspend construction of the fence. The entire border is 2,350 miles long and would cost an estimated $440m (£314m) to fence, including access roads.

The fence is being erected in response to complaints from the troubled north-eastern Indian province of Assam that Bangladesh refugees are crossing into India in large numbers.

This is denied by Bangladesh.



SOMETIMES YOU NEED A FUND OF IMAGINATION, AS WELL AS FUNDS.



There are many sources of investment finance. But how many of them are also a source of inspiration? At 3i we can, in all modesty, claim to be both. Which is why a meeting with us is invariably a creative, as well as financial, experience.

As a private sector company, there isn't a stuffed shirt among us. As businessmen, we know business backwards. And as financiers, we're always looking forwards. So it's hardly surprising that we love a good challenge. And why not?

Within the 3i group, we deal with large projects and are prepared to back any one company with up to £35m or more; we have ICFC, whose understanding of small companies' problems is unique; and our Ventures Division who specialise in high-technology businesses.

3i INVESTORS IN INDUSTRY

To date we have successfully supported over 8,000 businesses, from small-scale family to major multinational companies.

Together we couldn't go wrong. Because they used their imagination. And we used ours.

THE CREATIVE USE OF MONEY.

INVESTORS IN INDUSTRY GROUP plc. 91 WATERLOO RD., LONDON SE1 8XP. TEL: 01-928 7822.

WORLD TRADE NEWS

Two charged over export of U.S. technology

CHICAGO — Two computer salesmen from New Zealand and Hong Kong have been charged by a federal grand jury as part of the Government's crackdown on the unlicensed export of sensitive U.S. technology.

The equipment, valued at $115,000, was purchased from Computer and Terminal Exchange of Pensacola, Florida. It was seized by customs officials at Chicago airport in August, 1982 after an investigation.

Charged with violating the Export Administration Act, conspiracy and making false statements to customs agents were Mr Denis Fife, 36, a New Zealander and self-employed computer salesman doing business as Dimension Systems of London, where he resides, and Mr Anthony Chan, a Canadian citizen living in Hong Kong.

The technology was capable of being used in weapons systems as well as for scientific and industrial uses, a U.S. customs official said. AP

Australia, W. Germany discuss submarine

Australia and West Germany have had initial talks on a multi-million dollar deal to supply a new generation German-built submarine to the Australia Navy, Reuter reports from Kiel. Herr Juergen Westphal, the Economics Minister for the state of Schleswig-Holstein said Canada and New Zealand may possibly join the project, which involves development of a new type of submarine.

Sandoz in S. Korea

Sandoz, the Swiss chemical group, has reached a co-operation agreement with Dong Wha pharmaceutical industrial company, one of South Korea's leading pharmaceutical manufacturers, John Wicks writes from Zurich. This foresees the setting-up of a jointly-owned subsidiary to be called Sandoz Korea for the production and marketing of pharmaceuticals for the Basle company's sales programme in South Korea.

Lurgi's Argentina deal

Lurgi of West Germany has won a contract for basic engineering work on Argentina's first polypropylene plant, expected to supply the country's whole domestic requirement and to produce a sizeable volume for export, Reuter reports from Frankfurt. Lurgi, a Metallgesellschaft subsidiary, said the plant, planned by Petroquimica Cuyo, will cost around $90m.

Bank urges Panhandle to keep Algerian LNG contract alive

BY FRANCIS GHILÈS AND JAMES BALL

A LEADING U.S. bank has asked Panhandle Eastern Corporation's Trunkline LNG subsidiary to keep alive its Algerian contract, if only at a token level. This follows the U.S. company's suspension last December of its contract to buy 5bn cu metres of gas anually from Algeria's state oil and gas company, Sonatrach.

This follows a memorandum six weeks ago presented by Sonatrach alerting eight leading U.S. banks to the damage the suspension of the contract would do to its foreign exchange earnings. It is claimed that Sonatrach would lose about $500m earnings. It would cut exports of LNG by 3bn to 12bn cu metres in 1984. Overall the company earned $12.7bn from its exports of oil, gas, condensates and liquid petroleum gas last year.

One option open to Sonatrach is to accept the role of a U.S. peak shaving suppliers—peak shaving involves meeting winter surges in demand rather than supplying year-round base loads. Algeria already plays this role for Distrigas of Boston to which it supplies 1.3bn cu metres each year.

Sonatrach, meanwhile, is involved in an increasingly acrimonious dispute with Enagas of Spain over the take-or-pay clause of a contract signed in 1974 which the Spanish company has never honoured despite a 1979 adjustment in Spain's favour. Although Algerian exports of LNG to Spain have increased gradually since 1980, to reach 1.4bn cu metres in the year to April 1984, today such shipments still amount to less than one-third of the initial volume contracted for by Enagas.

A $56m deal to build a dam at Mexenna, which had been awarded to three Spanish companies, was cancelled last month and the Algerian authorities are threatening further reprisals.

Although the volume of Algerian gas exports will rise in 1984, this increase is somewhat deceptive as it is solely due to the build-up in deliveries to Italy via the Trans-Mediterranean gas pipeline. Supplies to Italy are expected to reach 7bn cubic metres in 1984. But LNG plants in Algeria will continue to operate at about 50 per cent capacity.

Shipments of LNG to France will remain at the same level as last year, 9bn cubic metres; Gaz de France will try to cushion itself against oversupply by reducing takes of gas from the Soviet Union. The latest contracts with Western European customers include an 80 per cent take-or-pay clause allowing a 20 per cent reduction in annual take before further reductions are negotiated. Italy, too, is likely to try to make the Soviet Union rather than Algeria its flexible or "swing" supplier.

The unit price per million British Thermal Units (BTU) paid by Sonatrach's customers varies widely. Prices of deliveries to France, Belgium and Italy have dropped to around $3.94 per million BTU, fob while Trunkline was suspended at $3.51m BTU fob last December. This is the level Distrigas of the U.S. is estimated to be paying currently, while the Spanish price may be as low as $2.75.

In recent negotiations, Spain has offered to raise its price to $3.94 in return for agreeing a lower contract volume.

ALGERIAN-SPANISH LNG TRADE

Contracted and taken supplies—bn cubic metres

	1976	1977	1978	1979	1980	1981	1982-88
Take-or-pay volumes contracted in 1974*	0.51	1.53	3.06	3.57	3.57	3.57	4.59
Taken by Spain	0.45	0.25	0.35	0.61	1.20	1.35	1.40†

Notes: * Amended in 1979 to extend the final rise from 1980 to 1982; † 1982 through Q1 1984.

Sources: Instituto Nacional de Hydrocarburos and Financial Times International Gas Report

Mitsubishi in Spanish engine accord

By Robert Cottrell in Tokyo

MITSUBISHI Motors Corporation (MMC), the Japanese automobile manufacturer, plans to supply petrol engine parts and technology to Mercedes - Benz Espana (MBE), the Spanish commercial vehicle manufacturer which is a subsidiary of Germany's Daimler-Benz.

The deal marks MMC's first operational tie-up with a European vehicle manufacturer, but Mitsubishi Motors said yesterday that the companies are not discussing licensing production of MMC commercial vehicles to MBE.

According to a plan now being studied by both groups, some 6,000 MMC two-litre petrol engines would be fitted annually in MBE commercial vehicles, starting next year. In 1982, MBE produced some 12,000 diesel-powered commercial vehicles and vans,

Dowty wins Brazilian coal mining equipment order

BY ANDREW WHITLEY IN RIO DE JANEIRO

DOWTY MINING EQUIPMENT, a part of the Dowty Group of Britain, has broken a long drought for UK industry in Brazil by winning a £16m order for coal mining equipment.

Dowty was recently informed by Companhia Riograndense de Mineracao (CRM), the Rio Grande do Sul state mining company, that it had won the tender to supply equipment for a major new coal mine, Leao II, beating competition from Japanese, West German and other UK companies.

The Tewkesbury company is to supply CRM with five "long-wall" mining faces—the most advanced, and most expensive, form of coal mining—as well as additional equipment. Much of this will be sub-contracted from other UK manufacturers, including Anderson Strathclyde.

Final negotiations in Rio Grande do Sul this week will settle which of two alternative "packages" of equipment CRM wishes to take. One contains all UK manufactured equipment, while the second draws on local suppliers for about 35 per cent of its value—primarily for the fabrication of the mine's hydraulic roof supports.

Import finance is being provided by the Inter-American Development Bank (IDB). Indeed, the availability of IDB finance was probably crucial to the success of the Dowty bid, under negotiation for over two years. Britain's Export Credit Guarantee Department (ECGD) and most other western official credit agencies are currently reluctant to extend new medium-term cover to Brazil.

The order, estimated at between $21m and $23m, will be the largest won by the UK in Brazil since late 1982. If all goes well over the coming days, final contracts are likely to be signed next week.

WORLD TRADE NEWS

Latin American move towards common market

BY JIMMY BURNS IN BUENOS AIRES

A MODEST but potentially significant step towards the formation of a new common market in the Third World was taken at the end of April in the Uruguayan capital of Montevideo when leading government officials from 11 Latin American countries met under the auspices of the Association for Latin American Integration (Aladi).

In a rare display of regional consensus officials approved in principle the following points:

● Implementation of a system of preferential tariffs;

● Presentation of a programme by November 30 to reduce all non-tariff barriers within the region within a three-year period;

● A commitment to revive the 1969 Santo Domingo multilateral accord which set up mechanisms for co-operation between central banks in the region for settling trade payments;

● A commitment for broad support for the promotion of bilateral counter-trade agreements in the region as a way of saving foreign exchange at a time of persistent balance of payments difficulties;

● A schedule for Aladi comprising at least two meetings a year to reinforce the spirit of regional association and the practical aspects of co-operation and interchange.

General Alvarez: warmly applauded speech.

Given the region's heterogeneity, the traditional rivalries between Latin American neighbours and the essentially voluntary nature of Aladi's resolutions, officials remained understandably cautious about the future.

Nevertheless, the unprecedented gathering in Montevideo of 11 foreign ministers and their spirited commitment to joint action in spite of past differences appeared to indicate that the political will for integration was at last materialising.

Paraguayans and Chileans amiably shared views with Argentines and Mexicans, and Uruguay's authoritarian president, General Gregorio Alvarez, was warmly applauded in an impassioned inaugural speech in defence of Latin American solidarity.

Protectionism in Western Europe and the U.S., a realisation that opportunities for trade with the developed world will continue to be limited in the short- to medium-term as recovery remains slow and the prospect that fresh credits from traditional sources of finance are being reduced, appear to be behind the current search for an answer in regional trade.

"We have entered a period in which solidarity in the region has moved from the rhetorical to the concrete out of sheer necessity," commented Sr Leopoldo Tettamanti, the new Argentine ambassador to Aladi and one of the main architects of the initiative for the Montevideo meeting.

Rhetoric has certainly surrounded the theme of Latin American integration until now. Aladi had until recently been dismissed as an essentially bureaucratic institution capable of absorbing part of the huge surplus in the Latin American civil service, but with no real achievements to its name.

While Aladi's headquarters has dragged its feet over procedure and protocol, member countries have blatantly flaunted the organisation's spirit by introducing a mounting list of non-tariff barriers, and ignoring the financial agreements of Santo Domingo in response to their mounting debt problems.

Last year out of $50bn of manufactured goods and $10bn in foodstuffs imported by Latin America only $4bn and $2bn respectively came from within the Aladi grouping.

Officials believe that if the political will is maintained and strengthened then Aladi could provide the instruments needed to make integration a reality. They point out that the meeting followed earlier progress toward a common development strategy in January's economic summit in Quito and the publication of recent documents by other regional organisations such as the UN Commission for Latin America and the Caribbean (Cepal) calling on Latin America to organise itself economically as a unit.

On the surface, the implementation of a system of preferential tariffs is plagued by potential pitfalls, given the complexity of tariffs structures within individual countries.

A three-year period for the lifting of all non-tariff barriers, meanwhile, is recognised by some officials as too ambitious, given the fragile nature of most Latin American economies.

At the meeting, Brazil significantly pressed for escape clauses in the event of continuing balance of payments difficulties.

Aladi recognises three different levels of development among its members. The system of preferential tariffs agreed last weekend were set nominally at 10 per cent for the most developed countries (Argentina, Brazil, and Mexico), 7.5 per cent for intermediate countries (Venezuela, Uruguay, Peru, and Chile) and 5 per cent for the least developed (Ecuador, Paraguay, and Bolivia). The least developed countries will also be entitled to present a larger list of products subject to tariff preference.

Aladi officials believe that the main area of trade to benefit from a properly implemented system of preferential tariffs will be exports of manufactured goods.

Regional trade in these products has grown by more than a third in the past decade and represents over 20 per cent of all Latin American manufacturing exports.

Two areas where the spirit of Aladi appears to have found practical expression is in the commitment to counter-trade and greater intra-regional financial cooperation.

Last month an important counter-trade agreement was signed between Mexico and Argentina, and there have also been recent examples of increased financial co-operation within the region.

In Montevideo, Argentina approached several Latin American countries to seek their co-operation in helping Bolivia out of its financial crisis apparently invoking the spirit of the $500m rescue package provided earlier for Argentina by Brazil, Mexico, Colombia, and Venezuela.

U.S. tax move may cause treaty changes

BY NANCY DUNNE IN WASHINGTON

THE U.S. Government will seek to renegotiate its double taxation treaties with its major trading partners if President Ronald Reagan approves the recommendations of the Administration's working group on unitary taxation, according to senior Treasury Department officials.

The working group's final report, which will recommend that the American states abandon the practice of taxing corporations on the basis of their foreign earnings, is expected to reach the President's desk by the end of the month.

He is expected to accept the group's proposals which attempt to appease the trading partners without forcing a federal solution on the 12 states which use worldwide unitary taxation.

While refusing to endorse federal legislation abolishing the tax practice, the working group managed to obtain the agreement of state governors to a "water's edge" solution by promising to provide increased tax assistance to the states and to share federal tax information.

Existing double taxation treaties forbid the sharing of information provided by foreign governments to the Internal Revenue Service about taxes paid by overseas corporations.

These, Treasury officials say, would have to be renegotiated or modified, if the Federal Government is to keep its commitment to the states.

Treasury officials add that they do not expect the states to wait until the treaties are changed before retreating from the worldwide unitary tax. Mr George Deukmejian, Governor of California, has recommended that multinationals be permitted to select the basis on which they are taxed.

On senior Treasury official said it was his interpretation that California and some of the other states could amend their tax practices by administrative action without having to move any changes through state legislatures.

Treasury officials were unanimous in declaring the working group's compromise "a notable success of federalism."

Mr Aziz . . . visiting Tokyo

Arabs woo Japan for support against Iran

By Kathleen Evans in Kuwait

A CAMPAIGN is under way by the Arab states to try to dissuade Japan from buying large quantities of Iranian oil, considered a vital prop in sustaining the Iranian war effort against Iraq.

Later this month, Sheikh Sabah al Ahmed, the Kuwaiti Foreign Minister, and Mr Tariq Aziz, the Vice-Prime Minister of Iraq, are to visit Japan representing the Arab League. At the League's meeting in Baghdad last month, it set up a committee to try to persuade Western and industrialised nations to refrain from taking any measures which might lead to the prolongation of the Gulf war.

Japan has become the focus of Arab attention because it is still Iran's top oil customer, despite numerous Iraqi attacks on oil shipping. Japanese crude oil imports from Iran last year ran to $4.2bn and the Iranian market of 36m people is a more promising one for Japan than Iraq. Japanese exports to Iran last year were worth $2.5bn compared with $632m to Iraq.

Japanese oil purchases from Iran have declined recently because of difficulties of access for Japanese exports in Iran, and the Iranians are trying to woo the Japanese. Shortly after the Arab League committee was established, Mr Ali Akhbar Velayati, the Iranian Foreign Minister, visited Tokyo and asked the Japanese to increase their oil purchases to 600,000 b/d.

But the Iranians made no promises about additional export opportunities for Japan, and last month's crude contracts of 300,000 b/d are likely to decline to 200,000 b/d this month and thereafter perhaps to 150,000 b/d, Japanese officials say.

The Arab states feel that Japan cannot continue to make large oil purchases from Iran while maintaining that it wishes to see an end to the war. The Arabs are not planning to use heavy-handed tactics with Japan but one Kuwaiti official said: "If Japan does not respond, then it must take the consequences."

Economically, the boot is on the other foot. Only five years ago, the Japanese were desperately trying to deepen their economic ties with the Arab oil producers to secure their energy supplies, but the world oil glut has reversed that situation.

The Gulf state of Qatar, for instance, is most eager to maintain Japan's interest in its energy supplies. Without a commitment from Japan for long-term purchases, Qatar cannot go ahead with a large scale liquefied natural gas project to develop its massive North Dome gas field.

Kuwait is also embarking on a campaign to buy into the Japanese market through Mitsubishi Oil. A shareholding may become available with the Texaco takeover of Getty Oil, which owns half the company. Kuwait Petroleum Corporation officials have sounded out Japan's Ministry of Trade and Industry, but have been politely told that such a purchase would be "difficult" on the grounds of national security.

Share prices of the stock have nearly doubled since it became known that KPC was interested. Mitsubishi Oil, with its three refineries, a lube oil plant and an aromatics facility, would be an attractive entry into the Japanese market for Kuwait, for the company holds a 9 per cent share of the total market.

The Kuwaiti request has put Miti into a quandary, say Japanese oil men, and a heated internal debate is said to be going on. Some fear that if Japan is adamant about refusing the Kuwaitis access to the Japanese market, then retaliation against the Japanese shareholding in the Arabian Oil Company of Kuwait is a possibility.

Japanese officials say, somewhat hesitantly, that they do not think such a retaliation is in the offing.

Nevertheless, Japanese oil men are currently upgrading KPC's chances of gaining its stake in the Japanese market. Even with an oil glut, Japan may still prove to be highly sensitive to Arab wishes.

UK NEWS

Health care company in £18m takeover

BY ROBIN REEVES, WELSH CORRESPONDENT

THE INVACARE Corporation of Ohio has acquired Carters (J. and A.) of Bridgend, South Wales, in a £18m deal designed to assist the U.S. company's entry and expansion in the European market. Both companies make health care equipment.

Besides extending Carters' range of equipment, such as wheelchairs and walking aids, the new parent company plans to introduce fresh products to the UK subsidiary. It aims to expand employment at Bridgend, from the present 200 to 600 over the next four to five years.

The takeover and expansion is being backed by a substantial selective financial assistance grant from the Welsh Office.

The proposed new products include the manufacture of oxygen concentrators, a less bulky and potentially cheaper method of providing for patients requiring long-term supplies of oxygen than the usual cylinders.

The concentrators use a molecular sieve to extract and concentrate oxygen from the air and can be plugged into a normal domestic electricity supply.

The leading UK oxygen producer, BOC, which has a U.S. subsidiary manufacturing concentrators, estimates that their introduction could save the UK National Health Service up to £2m a year.

This suggestion, together with other aspects of the expanding home medical care sector, is the subject of investigation by chartered accountants Arthur Anderson and Company for the Department of Health and Social Security. Its report is due to be published soon.

Before the Invacare takeover, Carters was owned for a short time by another U.S. company, Diasonics, makers of sophisticated hospital equipment.

Mr Donald Karl, president of Invacare, is the new chairman of Carters (J. and A.).

Raymond Snoddy writes: Monsanto, the U.S. chemicals company, confirmed yesterday that it plans to open a silicon wafer manufacturing plant in Britain.

The investment, which will total between $50m and $60m, will be announced next week by Mr Norman Lamont, the Department of Trade and Industry Minister responsible for investment in the UK.

Monsanto refused to say yesterday where the new plant, which will manufacture the silicon wafers used to make integrated circuits, would be located.

Monsanto already employs around 1,800 people in Britain. The products range from intermediates for the manufacture of artificial fibres to rubber-testing equipment.

Mr Earl Harbison, Monsanto's executive vice-president, confirmed that the company was planning a wafer plant for Britain and a further two plants in Asia.

Monsanto produces about $250m worth of wafers a year at the moment in two plants in the U.S. and one in Kuala Lumpur, Malaysia.

Mr Harbison believes annual sales of the wafers will rise to $750m within five years as the new plants come on stream.

First sign of break in striking miners' unity

BY PHILIP BASSETT, MARK MEREDITH AND ROBIN REEVES

THE FIRST signs of a crack in the unity of striking UK miners were seen last night, at the same time as supplies of coal to the beleaguered Ravenscraig and Llanwern steel plants began to seem more certain.

Until now, the majority of UK miners have been on strike, apart from most miners in Nottinghamshire and some in other areas. However, the first indications of what could be a revolt came yesterday when miners at the Manton colliery, in the South Yorkshire area, said they wanted to return to work. Miners at the pit, which employs about 1,320 men, have persuaded the pit's branch president of the National Union of Mineworkers (NUM) to hold a special meeting on Friday to discuss the issue.

Although strong pressure is likely to be put on the Manton miners to maintain strike unity it was not clear last night whether this was an isolated incident or the start of a trend.

Meanwhile, moderate miners' leaders will tomorrow press Mr Arthur Scargill, NUM president, to enter talks with the National Coal Board (NCB) "to see if there is anything on the table". Mr Scargill is likely to reply that the NUM is ready to talk at any time – provided it is not about pit closures.

Mr Ian MacGregor, NCB chairman, yesterday held out the prospect of much higher pay levels in the coal industry if it reduced its loss-making capacity and invested in highly capital intensive pits.

In the coalfields, 2,500 pickets turned up at Pye Hill colliery in Nottinghamshire, and there was some violence in other areas, with reports of a hut being burned

Welcome for decision on DBS

BY RAYMOND SNODDY

BRITAIN'S BROADCASTERS yesterday welcomed the decision by the Government to make the necessary legislative changes to allow the £400m direct broadcasting satellite (DBS) joint venture to go ahead.

Mr Leon Brittan, the Home Secretary, cleared the way for the BBC and the ITV companies together with an independent element to begin three channels of satellite broadcasting direct to homes – possibly as early as the autumn of 1987.

Mr Brittan confirmed that he was prepared to postpone the prospects of competition over DBS and give the Independent Broadcasting Authority (IBA) the right to defer readvertising the franchises of the ITV companies until 1997 to enable investment in a risky venture.

Mr Brittan said that after reviewing the case the Government had decided that the best hope of securing a good quality British satellite service in the late 1980s lay in a joint project.

"Our objective of establishing a British DBS service on a firm footing could be jeopardised if competition for audiences and revenue had the effect of fragmenting them before they were established," Mr Brittan said.

The Government has, however, decided that the IBA can invite applications for a competitor in space three years after the launch of the services of the joint project.

EEC services 'too restricted'

BY DAVID HELLIER

THE EUROPEAN insurance market ought to be freed from unnecessary regulations so that UK companies can benefit from a genuine common market in services, Mr Paul Channon, Minister for Trade said yesterday.

Free trade in services was as much part of the vision of the Treaty of Rome as free trade in goods, he said.

Mr Channon was addressing a seminar on barriers to trade in Europe, organised by the Kangaroo Group, an international, all-party group of Euro-MPs.

He told them that the Community had been very slow to dismantle the barriers to trade in invisibles.

"One of the main constraints on the development of trade in financial services within the Community is the differing regulatory regimes adopted by member-states, frequently with the laudable objectives of investor and consumer protection," he said.

Support for imports of Norwegian gas

BY IAN HARGREAVES

MR PETER WALKER, the UK's Secretary for Energy, has given his backing to a modified version of British Gas's plan to import about £20bn of supplies from Norway's Sleipner gas field.

In a separate development, a parliamentary committee on energy announced yesterday that it would publish a report on the Sleipner question before the end of the month, even though Mr Walker's department has declined to offer evidence on the subject pending its consideration by Cabinet.

In the first indication of his department's views on the Sleipner deal, Mr Walker has circulated a detailed paper to other departments.

This suggests that British Gas should be allowed to complete its negotiations with Statoil of Norway, but that it should press for a smaller offtake of gas than envisaged in the existing draft contract.

The paper makes one further concession to the position of the Treasury, which has been vigorously contesting the need for the Sleipner deal, by agreeing that the current ban on the export of UK gas should be reviewed in the light of any agreement on Sleipner.

It does not, however, touch on what the Treasury sees as the crucial issue – that of price. The Treasury is arguing that only if British Gas agrees to a substantial increase in its prices to consumers will it be able to justify the $4.10 to $4.25 per million BTUs price involved in the Sleipner contract.

It believes a phased 20 per cent increase in gas prices can be justified to set British Gas's pricing policy on an economic basis.

The timetable for a decision on the Sleipner deal remains uncertain.

Plans announced for 17-plus qualification

BY MICHAEL DIXON

ALTERNATIVE COURSES in schools olleges to prepare 16-year-olds for working life instead of academic examinations were announced by Sir Keith Joseph, Secretary for Education and Science, in London yesterday.

Outline plans for the full-time courses lasting a year and leading to a new 17-plus qualification have been drawn up by a joint board of the Business and Technician Education Council and the City and Guilds of London Institute, headed by Sir Edwin Nixon, chief of IBM UK.

Employers and educational interests are being invited to join in working out the detailed arrangements with a view to making the courses available from September 1985.

Points still to be decided include the name of the 17-plus certificate which will be awarded to all who complete the one-year programme, noting only their successful achievements.

At first the courses will serve as a school or college-centred alternative to the Youth Training Scheme (YTS) run by the Manpower Services Commission. But part-time versions, perhaps operating in conjunction with the YTS, may be introduced later.

Although the programmes are nominally open to all 16-year-old pupils, Sir Keith does not expect them to be taken by academically inclined children in preference to studies for the Ordinary- and Advanced-level exams.

At least three quarters of the programme will be spent in broad vocational studies, where possible, including experience of work, and a common core of related activities.

Nuclear inquiry warned of delays over safety

FINANCIAL TIMES REPORTER

THE INQUIRY into the building of a pressurised water reactor as Sizewell in eastern England would not end before significant progress was made on resolving outstanding safety issues, the counsel to the inquiry, Mr Henry Brooke QC, warned yesterday when the hearing resumed.

Mr Brooke was commenting after the Central Electricity Generating Board has reported continuing delays in making submissions to the Nuclear Installations Inspectorate, the UK nuclear safety organisation.

Lord Silsoe, the board's leading counsel, reported that only eight out of 19 submissions planned for the period up to the end of April had been made. He said most were now expected later this month.

Sir Frank Layfield QC, the inquiry inspector, questioned the latest forecast, but Lord Silsoe said he could only state that they were intended dates.

Mr Brooke warned that if delays in settling important issues continue, the "imaginary" date on which the inquiry would end would have to be put back.

He said the inquiry had served notice that the board and the inspectorate would be available for full cross-examination on the details of agreements on certain major issues.

These include the risk of an earthquake endangering the safety of the proposed plant, the risk of an air crash and the segregation of emergency systems.

The inquiry began in January last year and at the present rate of progress is not expected to be completed before December.

The CEGB announced at the inquiry yesterday that new design changes would increase the cost of Sizewell B by a further £1.6m.

The total increase in costs caused by design changes since original plants were published two years ago has now reached £13.6m.

The board has said it can build the proposed American-style PWR for around £1.2bn, less than the cost of either a British-designed advance gas-cooled reactor or a coal-fired station with a comparable output of electricity.

UK NEWS

John Moore and John Edwards look at moves to improve investor protection

Mixed response to Gower plans

WIDE-RANGING proposals for improving the protection of investors in London's financial community, outlined in a Government-commissioned report, have received a mixed response from pension funds, accountants, futures brokers and investment trusts.

Through their associations and representative bodies City of London interests are responding to an invitation by Mr Norman Tebbit, Secretary of State for Trade and Industry, to submit their observations on the report on investor protection, prepared by Professor Jim Gower, the Department of Trade and Industry's consultant research adviser on company law. The report was published in January.

Prof Gower, in his proposed structure for improved regulation of the City, said that the Trade Department should have sweeping powers to approve the establishment of self-regulatory agencies which would be responsible for regulating investment activity. It should be an offence for anyone engaged in investment business to trade without first registering with a self-regulatory agency or the department.

Prof Gower envisaged that the Council for the Securities Industry, which is fighting to become the City's main regulatory body, should have a co-ordinating role between the Trade Department and the self-regulatory agencies which would be established.

The Association of Futures Brokers and Dealers, a self-regulatory agency which is being formed by London's five commodity and financial futures exchanges, said it wants changes in the law to enable it to act quickly to safeguard investors' interests and wants powers to appoint receivers when necessary.

While backing Prof Gower's recommendations for the creation of a number of self-regulatory agencies, the association opposes the suggestion that the Council for the Securities Industry should play a major role in supervising the agencies. It claims that the council has no experience or knowledge of the futures markets.

Instead it recommends that the supervision of agencies should be handled either by the Bank of England or the Trade Department – possibly through a specially appointed commission.

The association says that this would help avoid unnecessary proliferation of organisations. It also argues that the idea of recognising investment exchanges should not be encouraged.

The National Association of Pension Funds said that it welcomed Prof Gower's attempt to strengthen the measure of protection afforded to investors without resort to full statutory regulation.

Mr Norman Tebbit

The pension funds' association believes that it would be "right and proper" for all individual in-house managers and advisers to register themselves under the proposed regulatory framework.

The association is conscious that others concerned with the management of funds will need to be regulated by a pensions self-regulatory agency.

The Consultative Committee of Accountancy Bodies believes that the Gower proposals would open the way for unnecessarily detailed intervention by Government into the conduct of investment business which will increase bureaucracy both in Government and the City.

It considers that Prof Gower "has seriously underestimated the blunting effect that the consequent administrative burden will have on the competitive nature of UK investment markets."

The accountants urge that if the definition of an investment business is extended to include those giving advice exemption should be given for professionals such as accountants and solicitors giving investment advice only as an incident to their primary activity.

The Association of Investment Trust Companies, representing the investment trusts, argues that a supervisory body, which might be called the Council for Investor Protection, should be formed. "It would be logical for the Council for the Securities Industry to adopt the role of the Council for Investor Protection, but to do this its membership and character would have to be changed.

The council should be formed of representatives of self-regulatory agencies with a significant number of lay members to command public confidence in its independence and impartiality. It argues that if a supervisory body were formed there would be no need to set up a separate commission.

The association does not consider it necessary to form a separate self-regulatory agency for investment trust mangements, but would help and support wider based self-regulatory agencies covering this activity.

Call to phase out securities council

By John Moore

THE UNIT Trust Association has told Mr Norman Tebbit, the Secretary of State for Trade and Industry, that the Council for the Securities Industry should be phased out when new proposals for investor protection are introduced.

Powerful opposition is now building up against the continuation of the council in any form once proposals suggested by Professor Jim Gower for improved investor protection are implemented.

The council has been fighting to play a major role in any new regulatory structure implemented by the Government. In its six years of operation the council has been under attack from all quarters of the City as ineffective and unnecessary.

In its own submissions on the Gower proposals to Mr Tebbit the council, formed of representatives from City interests, indicated that there was division among its own membership about its role.

Both the Accepting Houses Committee, representing leading merchant banks, and the Issuing Houses Association have indicated that they foresee a different structure of self-regulation as envisaged by the council

Survey sees fresh threat of inflation

BY DAVID HELLIER

THE UK's long-term economic outlook may be endangered by wage and price inflation, lack of skilled labour and supply delays, the London Chamber of Commerce said yesterday.

The chamber claims that there is fresh evidence of the kind of economic ills that have put a check to recoveries in the past, although the overall short-term prospects look encouraging.

Business in the South-East of England is generally emerging from the recession lean and optimistic, according to the chamber's latest quarterly economic report and survey. However, the problem of unemployment remains and there seems little sign of any short-term improvement.

The survey, carried out from a sample of 300 companies based in the South-East, indicates that businesses are concerned about increased competition and are exposed to the dangers of inflation.

The chamber says that, in dealing with cost inflation, there is a growing tendency to pass on costs in increased consumer prices with fewer companies attempting to deal with the problem through tougher wage bargaining.

It hopes that the reductions in business costs stemming from the recent Budget, particularly from the abolition of the National Insurance surcharge, will go towards price reductions rather than into fuelling higher wage inflation.

The survey shows that most manufacturers are pulling out of recession into a much tougher business climate, and that there is optimism based on increased domestic orders and inquiries. However, apart from a few larger companies, the growth of export orders has lagged behind.

The home market is proving more favourable, with 59 per cent of the companies surveyed reporting increased domestic orders, the bulk of these going to the chemical, metal and paper industries. Other sectors have maintained their previous positions.

There is some good news on employment. Many companies, particularly larger ones, are shifting towards investment programmes which could create jobs in the longer-term, rather than simply replacing existing plant and equipment, says the survey.

The completion of the M25 London ring road will help business in the area by providing easier and quicker access to the national motorway network.

Hand tool makers see signs of revival

BY IAN RODGER

THE BRITISH hand tool manufacturing industry, which has often been given up for lost to aggressive competitors from Taiwan and other industrialising countries, is showing signs of revival.

Last year, for the first time in 10 years, sales of hand tools by UK manufacturers grew in real terms. It was not a big increase, only 2.6 per cent to £220.8m, and it was made from a very low base, but the pace of recovery picked up during the year, with fourth-quarter sales 13 per cent up on the same period in 1982 in real terms.

The industry also raised its home market share slightly last year, from 53 per cent to nearly 56 per cent, although a decline in exports meant that it registered its first trade deficit in history.

Mr K.C. Hopkins, managing director of Neepsend's Cintride drill-making subsidiary and president of the Federation of British Hand Tool Manufacturers, expected that the "leaner and fitter" industry would respond to the challenge of intense competition.

He said the industry had consistently improved the quality, marketing presentation and pricing of its products and was rated very highly in world markets, achieving over two-fifths of its sales abroad.

The industry's main problem remains strong competition from manufacturers in developing countries. The federation has been seeking government support for measures to stop dumping and the import of substandard and counterfeit product imports.

A year ago, the federation suggested that British manufacturers in search of products to complete their ranges of tools should try to obtain them from other British manufacturers rather than foreign suppliers.

The industry's sales totalled £220.8m last year compared with £204.2m in 1982. Imports rose from £86.2m to £89.3m, while exports fell from £104.9m to £95.7m. The British market for hand tools was worth £224.1m in 1983 compared with £186.9m in 1982.

Fall in housing starts

BY ANDREW TAYLOR

THE PACE at which UK housebuilders are starting work on new homes has slowed as the number of new houses coming on to the market rose sharply during the first three months of this year.

The number of starts made by housebuilders on new homes fell by 9 per cent during the first three months of this year compared with the corresponding period in 1983, according to figures published yesterday by the Environment Department.

The figures show that over the same period the number of new homes and flats completed by builders rose by 16 per cent.

The rise in completions follows an upsurge in housebuilding activity since 1982. Last year starts made on private homes rose to 167,400 – the highest level for ten years. Builders, however, have warned that the pace of new building is likely to slow in 1984 as the market seeks to absorb the larger number of completed houses.

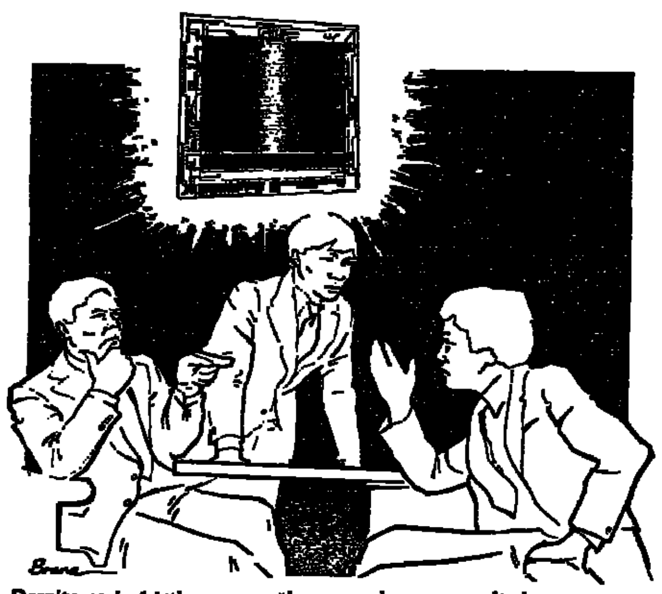
Private sector starts during the first three months, although 4 per cent higher than in the previous quarter, were 7 per cent lower than in the corresponding period in 1983. Completions, however, were 8 per cent higher than in the previous quarter and 22 per cent higher than a year ago.

Public sector starts were 35 per cent higher than in the previous quarter but 14 per cent lower than the corresponding period in 1983. Completions were unchanged compared with the previous year but 6 per cent lower than in the preceding three months.

It is provisionally estimated that 18,600 houses and flats were started in Britain during March compared with 20,100 in the same month last year. Completions in March, however, rose to 16,900 compared with 15,700 last year.

THE MANAGEMENT PAGE

EDITED BY CHRISTOPHER LORENZ



Despite early friction among the researchers an esprit de corps soon developed

'Management by whisky'

Guy de Jonquieres explains the success of a co-operative Japanese R&D project

FEW OF Japan's high-technology feats have more impressed and disconcerted its Western competitors than the dramatic rise of its microchip industry. In only five years, its manufacturers have seized world leadership of the $4bn market for mass-produced "standard" memories, the most widely-used type of microelectronic device.

The springboard for that achievement—and for many of Japan's recent advances in computing—was a $300m four-year research programme launched in 1976. Known as the Very Large Scale Integrated (VLSI) Semiconductor Project, it resulted from a government initiative which brought together five large Japanese electronics manufacturers in an R&D "association."

An intriguing analysis of how the programme got started and why it worked so well has emerged in an unpublished paper by Kiyonori Sakakibara, a visting scholar at the Alfred P. Sloan School of Management, part of the Massachusetts Institute of Technology.

Its appearance coincides with efforts in many Western countries — partly inspired by Japan's example — to stimulate advances in electronic technology through collaborative R&D programmes. Such projects include the EEC's Esprit, Britain's Alvey directorate and the U.S. Microelectronics and Computer Technology Corporation (MCC).

Sakakibara's central thesis is that the key to Japan's VLSI programme — and to all other ventures of its type — is to be found in the management and motivation of the team chosen to spearhead the R&D effort. In his view, these factors count for much more than the more easily quantifiable contributions of money and technical resources.

The VLSI programme was amply — though by no means massively — funded. Its annual budget averaged $72m, several times more than the five companies together were then investing in semiconductor R&D. But it was about the same as Texas Instruments, the largest U.S. component supplier, was already spending on its own.

Furthermore, the Government put up less than half the funds, and then only as repayable interest-free loans, not outright grants. But the incentive was enough to persuade the five companies reluctantly to submit to unusually firm official direction of the project, or "a bureaucrat's blueprint," as Sakakibara puts it.

Though Japan's electronics industry had already collaborated in government-backed research, the VLSI programme broke new ground by establishing a single "co-operative" laboratory, staffed by researchers seconded by the five companies, to do the basic R&D work. Previously, companies had always divided up the research.

The companies resented the arrangement at first. They complained about the tight government control and, as fierce commercial competitors, they were prone to acute mutual suspicion and squabbling; it took them six months just to agree a site for the co-operative laboratory.

Similar friction beset the laboratory's 100 researchers—at least for the first few months. In Sakakibara's view, the credit for turning them into a disciplined and highly effective team is largely due to one man: Masato Nebashi, the VLSI association's managing director.

While the head of the laboratory, Yasuo Tarui, concerned himself with technical matters, Nebashi concentrated on what he called "the human problem."

A retired civil servant with much experience of project management, he clearly possessed remarkable talents for patient leadership.

From the outset, he urged them to air their grievances and inhibitions openly, deliberately encouraging confrontation as a way to break down social and professional barriers. He also impressed on them that they were an elite, charged with a special mission, and that their performance was of keen interest worldwide.

"I wanted them to become good friends, communicate to each other and open their hearts," Nebashi recalled later. The method he chose was, by his account, typically Japanese—but to a Western eye, delightfully unorthodox. "All I did for these four years was to drink with them as frequently as I could."

One researcher described Nebashi's style as "management by whisky." Gradually, an esprit de corps developed as members of the team met night after night to fill their glasses and empty their souls. By the end of the project, many had become firm friends, and an alumnus association was formed, with its own newspaper.

Sakakibara concludes that the programme embodied two elements essential to any innovative research project. First, open communication at all levels between its participants. Second, the creation of an "institutional" environment.

"The co-operative laboratory, which was an *organisation* at first, became an *institution* by the leadership of Nebashi. He embodied the association's values; he infused it into the hearts of the researchers; he gave it the distinctive character; he lent it a social integration that went well beyond formal co-ordination and command."

All this sounds remarkably similar to the elusive concept of "corporate culture" currently much in vogue in large American companies. The question which Sakakibara's paper begs—but does not really attempt to answer—is whether the magic formula can be transplanted to other joint R&D projects—both in Japan and elsewhere.

By implication, however, that may be difficult. Sakakibara identifies several special factors which favoured the VLSI programme. One was timing; it was launched just as the technology was moving out of the phase of fundamental conceptual innovation, most of which had taken place in the U.S.

That left engineering implementation as the real challenge, and one particularly well-suited to the carefully co-ordinated group approach at which Japan excels. About a third of the VLSI association's funds were spent on importing from the U.S. sophisticated microchip manufacturing tools.

Perhaps even more important, the VLSI programme had a very simple and well-defined purpose. It set out to catch up with what U.S. industry, and IBM in particular, was already doing.

By contrast, many of the more recent collaborative R and D ventures have much more ambitious—even nebulous—objectives. Several, including Japan's 10-year project to develop an "intelligent" Fifth Generation Computer and Britain's Alvey scheme, aim to extend the frontiers of computer science.

Indeed, many Japanese scientists see the Fifth Generation Computer project as a test of whether they can make a quantum leap from improving on other people's ideas to pioneering fundamental innovations.

"From Imitation to Innovation: The Very Large Scale Integrated (VLSI) Semiconductor Project in Japan, by Kiyonori Sakakibara. October 1983. Warwick University Library, Working Paper WP 1490-83.

How Humberside Social Services got rid of its administrative 'mishmash'

BY NICK GARNETT

THE DUPLICATION and spawning of unnecessary layers of management through which decision-making is forced painfully to seep is the food and drink of bureaucratic structures.

Such, until recently, has been the experience at Humberside's Social Services in the North-East of England. Last month, however, the organisation was torn apart and replaced by one in which rigid and almost separate vertical lines of communication are giving way to a horizontal line of neighbourhood teams supervised by a slimmed-down management.

Bureaucracy

In the process, which is still the subject of concern and suspicion among the unions in spite of their acceptance of the new system's improved efficiency, a layer of senior management has been removed.

Changes in Humberside County Council's social services department, which employs 5,600 full- and part-time staff with an annual revenue budget of £35m, reflect a broader trend within local authorities to experiment with ways of bringing services to the "customer."

Humberside's Social Services are not a bureaucracy in the sense that a large part of the labour force are front line "shopfloor" staff — people who deal directly with the public like social workers, those handling the physically and mentally handicapped, home helps, child care workers and the staff running day centres and residential homes.

But decision-making and administration is channelled through a bureaucratic mechanism and it was this which the Labour-controlled county council wanted redesigned.

This has been done under David Peryer, the county's social services director, though it will take a few years before it is fully functioning.

A former lecturer in social administration who entered local government only seven years ago, Peryer was involved with the restructuring of services in East Sussex three years ago and the basis of that initiative has been used in Humberside.

Under the previous system Humberside, whose biggest urban centres are Hull, Grimsby and Scunthorpe, was split into four divisions.

Each had a divisional director and three assistant directors at headquarters, together with four principal officers, one each for the separate management lines supervising field staff, those involved with residential care, day care staff and administrative personnel.

Below those officers was a layer of 50 principal assistants and three separate vertical chains of command for people in the field (area managers down to social workers), residential workers (senior residential officers down to heads of homes) and day care. Each of these vertical structures had its own administrative arm dealing with personnel, salaries and recruitment.

The National and Local Government Officers Association accepts that this was a cumbersome and inefficient system.

With two layers of management between the divisional director and the people running residential homes it was unclear whether one layer — the principal assistants — were advisors or line managers or whether they had any real role at all.

The split of management responsibility between the three empires of fieldwork, residential and day care resulted in a cumbersome system of discussion and negotiation.

For example, if a social worker visiting an elderly woman decided that she needed more assistance in the home, she could also benefit from attending a day care centre, but that she would soon need to enter a home permanently, that social worker might have to talk separately with three administrative sections in different offices.

Peryer says it was too easy for the "ownership" of an individual case to become blurred between sections. They don't like to admit it but local authorities also "lose" people completely in administrative jungles.

The new structure — known as Patch — which has just come into effect involves 48 locally based teams grouped in eight districts. Each team generally contains social workers, heads of homes, home helps and so on who can now talk to each other directly without having to shout over the fences erected between vertical frameworks.

Each team has a team manager. Each district also has a district manager acting as a line manager for a handful of team leaders.

With no staff, other than a secretary, the district manager is also responsible for maintaining links with schools, the police and other parts of the community, a liaison job which before, Peryer says, was a "mishmash."

The structure now has three assistant directors for each of three districts, together with an assistant director for both finance and personnel and one responsible for principal officers at head office.

Four principal officers are now responsible for the elderly, children, mentally handicapped and what are termed special projects and there are two further officers for general administration and training.

Peryer says the new structure removes one management level, provides a clearer line of accountability, brings the management of services together at local level and simplifies administration. "People think they should hold onto advisors but here now everything depends on line managers," says Peryer. "Services are brought closer to the public and to other groups in the community."

The council says that the reorganisation should lead to yearly savings of £140,000. The cost of the system will be higher in the first few years though because of the extra lump sum cost of the system will be higher and the protection of salary levels for those moving into lower grade jobs.

It will take some time, however, before all the neighbourhood teams have their own premises. Ken Young, East Sussex's social services director, now has 35 of his 45 teams placed in the community after two and a half years. He says the scheme there is benefiting the public and has greatly simplified administration.

Suspicious

Sid Cunliffe, Nalgo's Humberside branch secretary, says that the old structure had a good deal of inefficient duplication built into it. Staff were concerned, though, that the council was not matching restructuring with extra money and were suspicious that parts of the Patch system would not work out as well as the theory suggests.

"We've reserved the right to discuss and review the system in a year's time, though we do hope it works," Cunliffe says.

Business courses

Microcomputers in management, Salford June 11-12. Fee: £245.00. Details from The Conference Office, Maxwell Building, University of Salford, Salford M5 4WT. Tel: 061-736 5843 x 449.

Finance and Secretary, London. June 6-8. Fee: BFr 42,000. Details from Management Centre Europe, Avenue des Arts 4, 1040 Brussels, Belgium. Tel: 02 219 03 90.

Treasury management: improving financial performance. London. June 6-7. Fee: £320 + VAT £48. Details from Crown Eagle Communications, 2 Bloomsbury Place, London WC1A 2QA. 01-636 0617.

Finance for the non-financial executive, London. June 12-13. Fee: Members of London Chamber of Commerce & Industry £132; £19.80 VAT. Non members £165 + £24.75 VAT. Details from London Chamber of Commerce and Industry, 69 Cannon Street, London EC4N 5AB. Tel: 248 4444 Telex 888941.

World congress on management development, London. June 13-15. Fee £345. Details from Brian Twiss, 198/200 Keighley Road, Bradford, West Yorkshire BD9 4JQ. Tel: 0274 499821.

Selling for success: how to satisfy industrial and commercial customers and beat the competition, London. June 11-13. Fee £275 + VAT. Details from The Programme Secretary, Marketing Improvements, Ulster House, 17 Ulster Terrace, Outer Circle Regents Park, London NW1 4PJ. Tel: 01-487 5811.

Licensing: the methods and techniques essential to the implementation of successful licensing agreements. London. June 13-14. Fee £340 + VAT £51. Details from Crown Eagle Communications, 2 Bloomsbury Place, London WC1A 2QA. Tel: 01-636 0617.

Motor Cars

LEASING

Residential Property

Legal Notices

PHILIP OSWALD BROWN'S SHAREHOLDING IN LEADING LEISURE PLC

MESSRS. COFFIN MEW & CO., 213 West Street, Fareham, Hampshire.

Restaurants Food & Wine

Clubs

Art Galleries

COLNAGHI, 14, Old Bond St., London, W1. 01-491 7408. Exhibition of ENGLISH DRAWINGS AND WATERCOLOURS. 9 to 25 May. Mon.-Fri. 10-6, Sat. 10-1.

Holidays & Travel

COMPANY NOTICES

ACTIBONDS INVESTMENT FUND S.A.

Société Anonyme d'Investissement
Luxembourg, 37, rue Notre-Dame
R.C. Luxembourg B 20.081

Shareholders are invited to attend the Annual General Meeting which will be held at the registered office on May 18th, 1984 at 11.00 a.m. with the following agenda:

Agenda

1. Receipt of the Reports of the Board of Directors and the Statutory Auditor.
2. Approval of the balance sheet and profit and loss statement as at December 31st 1983 and allocation of net results.
3. Discharge of the Directors and the Statutory Auditor.
4. Ratification of the co-option of a Director.

The Board of Directors

TOKYU DEPARTMENT STORE CO. LTD.

Notice to EDR Holders

Further to Notice of March 26, 1984 The Chase Manhattan Bank, N.A. announce that the interim cash dividend of Yen 3.50 per share has been converted to U.S. Dollars and amounts to US$15.35 gross per EDR. All presentations will be subject to deduction of Japanese withholding tax (if any) at the appropriate rates and representative payments will be US$12.28 net after deductions of 20% Japanese withholding tax or US$13.05 net after deduction of 15% Japanese withholding tax depending upon the residential status of the claimant and the application of any Double Tax Treaty concluded with Japan. Affidavits will be required in all cases where a withholding rate of less than 20% is to be used.

Accordingly, EDR holders may present coupon No. 10 forthwith at The Chase Manhattan Bank, N.A., Woolgate House, Coleman Street, London EC2P 2HD or at Chase Manhattan Bank Luxembourg S.A., 47 Boulevard Royal, Luxembourg or at Morgan Guaranty Trust Company of New York, Avenue des Arts 35, 1040 Brussels or at Kredietbank S.A. Luxembourgeoise, 43 Boulevard Royal, Luxembourg.

Notice is also given that the summary of Income of the above Company for the year to January 31, 1984 is as follows:-

		(Yen Millions)
Net Sales		258,642
Cost of Sales	202,740	
Depreciation	1,909	
Rentals	5,764	
Selling, General and Administration Expenses	42,883	
Net Interest	2,128	
		255,424
		3,218
Other net income		2,056
Income before taxes		5,274
Provision for taxes		2,970
Net income		2,304

THE CHASE MANHATTAN BANK, N.A.
London, as Depositary.
May 1984

O.K. BAZAARS (1929) LIMITED

(Incorporated in the Republic of South Africa)

DECLARATION OF DIVIDEND

NOTICE IS HEREBY GIVEN that final dividend No. 105 at the rate of 75 cents per share in respect of the financial year which commenced on 1 April 1983, has this day been declared payable on 6 July 1984, in the currency of the Republic of South Africa to all holders of Ordinary Shares registered in the books of the Company at the close of business on 25 May 1984. Non-resident shareholders' tax of 15 per cent will be deducted where applicable.

NOTICE TO BONDHOLDERS

CITY OF COPENHAGEN

BANQUE NATIONALE DE PARIS

US$250,000,000
Floating Rate Notes 1982 due 1989

LEUMI INTERNATIONAL INVESTMENTS N.V.

BANK LEUMI TRUST COMPANY OF NEW YORK
Principal Paying Agent

Educational

LEARN GERMAN in Germany. Intensive Crash Courses for adults throughout the year. Tel: Cologne 233671 or write for details: euro-schule, Goerzestr. 21, 500 Köln 1.

Personal

SPAIN — Driven Partridges early Nov.-early Feb. Apply Major Neil Ramsay & Co., Aberfeldy, Perthshire, PH15 2JE. Tel: 0887 20523/40. Telex 76371.

FOR COLLECTORS! — ANTIQUE SILK HERIZ. 150 x 197 cm, in very good condition, rare rug, ca. 1850. Contact under cipher 44-62'609, Publicitas, P.O. Box, CH-8021 Zurich.

Art Galleries

COLNAGHI
14 Old Bond Street
Tel: 01-491 7408
London W1
An Exhibition of
ENGLISH DRAWINGS AND WATERCOLOURS
9th May to 25th May
Monday to Friday 10-6
Saturday 10-1

FINANCIAL TIMES
PUBLISHED IN LONDON & FRANKFURT

INTERNATIONAL & BRITISH EDITORIAL & ADVERTISEMENT OFFICES

For Share Index and Business News Summary, Telephone 246 8026 (number, preceded by the appropriate area code valid for London, Birmingham, Liverpool and Manchester).

APPOINTMENTS

New directors at Ransomes Sims

Joining the main board of RANSOMES SIMS AND JEFFERIES are Mr J. S. Kerridge, chief executive and chairman designate of Fisons, and Mr C. P. Booth, company secretary. Both appointments are from June 1. Mr Kerridge will be non-executive.

★

Mr Andrew Buxton, a general manager of Barclays Bank, and Lord Camoys, managing director of Barclays Merchant Bank, have been appointed directors of BARCLAYS BANK PLC. Included in the senior management structure changes of Barclays Bank to take effect following the proposed merger of Barclays Bank and Barclays Bank International on January 1 1985 are two new general manager appointments: Mr Trevor Nicholas (Resources) and Mr Ted Foster (Corporate).

★

JACKSON EXPLORATION has appointed Mr George Williams and Mr Lloyd Ryman as non-executive directors. Mr Williams was managing director of Shell UK Exploration and Production before becoming director-general of the UK Offshore Operators Association. Mr Ryman was vice president and general manager of international exploration for Conoco, based in Houston.

★

Mr George Taylor has been appointed director of corporate relations of COMPAIR. He was manager of group public relations of John Laing.

★

PK CHRISTIANA BANK (UK) has appointed deputy managing director, Mr Gunnar Ljungdahl as managing director. The former head of the commercial banking division, Mr William Fleming, has been appointed deputy managing director. Head of the newly formed general marketing division, is Mr Finn Arnesen, general manager, who was attached to the European Banking Company. Mr Jan E. G. Lundqvist has been appointed general manager and head of the capital market division.

★

PANNELL KERR FORSTER has appointed five partners. Mr Chris Dedman (Darlington and Middlesbrough): Mr Ian Schofield (Leeds): Mr Paul Ellis, Mr Peter French and Mr Philip Thompson (Nottingham).

★

Ms Alexandra Benningsen has been appointed associate director of corporate car marketing at DINERS CLUB INTERNATIONAL. She joined Hogg Robinson Travel as sales and marketing director when Wakefield Fortune Travel was acquired by Hogg Robinson Travel in December.

★

Mr Derek V. Hopes, managing director of Bell and Howell's international A-V and video division, has been appointed chairman of BELL AND HOWELL A-V which markets the division's products in the UK and certain countries overseas. He has been a director of this British company since its formation in 1966, and is also on the board of Bell and Howell Ltd, the company responsible for all Bell and Howell's operations in Europe, Africa and the Middle East.

★

Mr Ken Bunnell has been appointed a director of DOLAN PACKAGING. He was managing director of the Dolan Group's No 1 corrugated box factory at Stalybridge.

★

Mr Tudor Heeps, has been appointed managing director of RATTEE AND KETT, a part of the Mowlem Group.

★

Mr J. D. F. (David) Miller and Mr Stephen Morley have been appointed non-executive directors of WOLVERHAMPTON AND DUDLEY BREWERIES. Mr Miller is a director of Coats Patons and Mr Morley a director of L.C.P. Holdings.

★

Mr M. W. van de Giessen and Mr J. M. Trinick have joined the board of WILLIAMSON TEA HOLDINGS.

★

Mr B. J. (Barry) Aldridge has been appointed marketing director of PLESSEY AVIONICS. Mr Aldridge joins Plessey from Marconi Avionics where he was marketing manager of the combat aircraft division.

★

DIVERSEY has appointed Mr Dick Lowe technical director (designate). Mr Lowe has recently completed a corporate assignment embracing worldwide co-ordination of Diversey's technical progress and capabilities.

★

Mr Chris Poole has been appointed to the board of MEADOWS AIRFREIGHT, with particular responsibility for controlling the day-to-day operations of Meadows national air services unit. He was general manager of the air services unit.

★

Mr Michael Devas has become chairman of KLEINWORT BENSON INVESTMENT MANAGEMENT, the investment management subsidiary of merchant bankers, Kleinwort Benson Limited.

★

Professor Julian Farrand has been appointed chairman of the CONVEYANCING COMMITTEE, in succession to the late Professor Harry Street. Professor Farrand was Professor of Law at Manchester University from 1968 to 1984. He has just taken up appointment as a Law Commissioner but will be acting indpendently of the Law Commission as chairman of the Conveyancing Committee. He is an acknowledged expert in the field of land law and conveyancing.

CONTRACTS & TENDERS

SYRIAN ARAB REPUBLIC

PUBLIC ESTABLISHMENT OF ELECTRICITY

CALL FOR OFFERS No. 1540

For the extension of BANIAS Thermal Power Station by the addition of 2 x 160 MW Units

The Public Establishment of Electricity announces the above mentioned project for the design, supply and erection of equipment and execution of civil works required for the extension of Banias Thermal Power Station by 2 x 160 MW units to be delivered ready for operation on a turn key basis.
SITE: About 2 km South of the City of Banias
FUEL: Fuel Oil and Crude Oil
COOLING: Open circuit (seawater)
CONNECTION: With the national network 230 kV through the existing substation
Offers are to be submitted on a turnkey basis, otherwise they will be rejected.
The price for civil works should be given separately in the offer and the Establishment alone has the right to exclude the civil works when contracting for the project, or leave it to be executed by the Tenderer awarded the contract.
FINANCING: The Tenderer shall submit two alternatives, the first to be financed by the Establishment and the second to be financed by or through the Tenderer.
BID BOND: Four million Syrian Pounds or the equivalent.
PERFORMANCE BOND: Shall be equivalent to 5% of the value of the contract.

Advance payment:
The Establishment may grant the Tenderer awarded the contract an advance payment amounting to a maximum of 10% of the value of the contract.

Execution time:
24 months for the first unit (first part), and 28 months for the second unit (second part).

Penalty of delay:
In case of delay in execution, penalties specified in the books of conditions shall be applied, provided that the ceiling on these penalties, excluding technical penalties, does not exceed 20% of the value of the contract.

Language of the offer:
Offers shall be in the English language.
Those interested can obtain the relevant bid documents from the Department of Foreign Contracts in the Public Establishment of Electricity against payment of 5,000 Syrian Pounds between 12-14 hours of the formal working days as from the 12th of May 1984.
Offers shall be submitted to the Public Establishment of Electricity before the end of the working hours of Wednesday 12/9/84.

GENERAL DIRECTOR OF PEE
ENG. R. IDRISS

Damascus, 28/4/1984

SYRIAN ARAB REPUBLIC

Public Establishment of Electricity
Financial Directorate—Extern contract section
Extern Call for offers No. 1536

Following our advertisement of the call of tender No. 1536 for the extension of Mehardeh thermal power station by the addition of 2 x 150 MW units which is mentioned in the daily official Bulletin No. 4687 dated 15/1/84.
The closing date for presenting the offer is extended till Wednesday 30th May 1984.
Drawing your kind attention that this extension is the final and we could not extend the call of Tender once again.

THE GENERAL DIRECTOR OF PEE
ENG. R. IDRISS

Damascus 1984

هكذا في الأصل

TECHNOLOGY

EDITED BY ALAN CANE

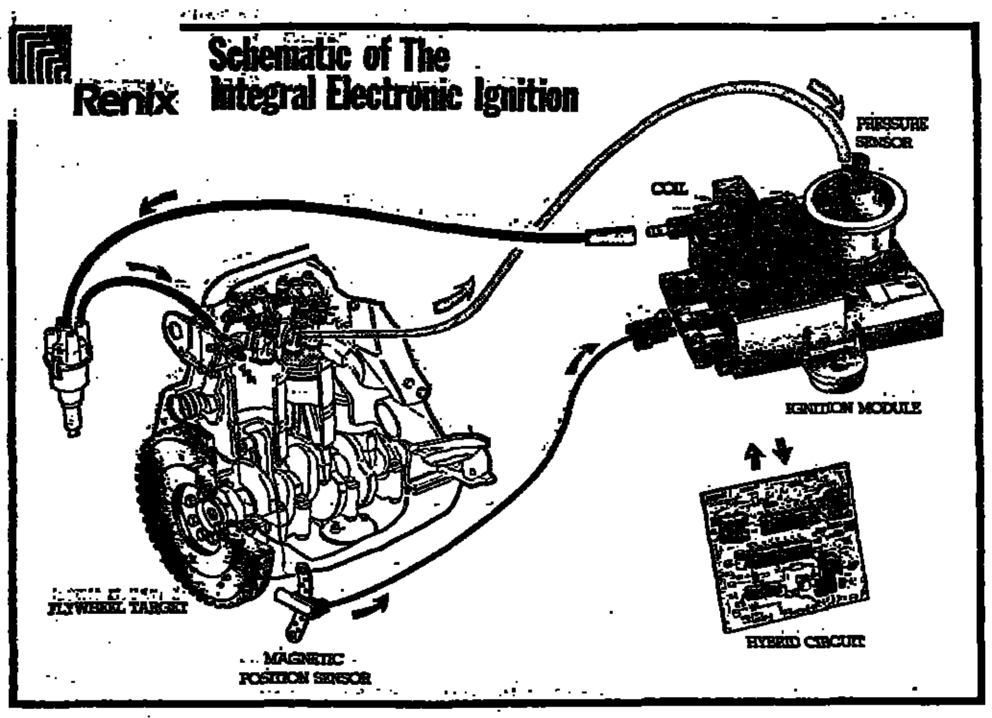
FRENCH JOINT VENTURE COMPANY IS A SUCCESS FOR RENAULT AND BENDIX

Renix targets for car electronics

BY PAUL BETTS IN PARIS

"THE CAR of the future will have three microcomputers. One will control all engine propulsion; another will control all the functions involving the chassis from adjusting the suspension to providing an anti-skid system; and the third will control the car interior from dash board instruments to air-conditioning and the car radio."

M Richard Tillie, the chief executive of Renix since the joint car electronics venture between the French state Renault car group and Bendix of the U.S. was set up nearly five years ago, says that such a computerised car will probably be on the road in five years' time. "We are already working on the first of the three computers involving the control of engine propulsion. We expect it to be ready in two years' time." This microprocessor—contained in a flat black box—will control electronically fuel injection, ignition, the automatic transmission, the car's cruise control system, as well as providing engine diagnostic and maintenance support.



Renix, in collaboration with the scientific and technical division of Renault, which owns 51 per cent of the joint venture with Bendix, is also working on developing an electronic voice control system, enabling a driver to make a number of ordinary operations by voice alone. Renault has already assembled an experimental computer voice-operated system on a Renault 9 in its labs at Rueil-Mal-Maison in the Paris suburbs. The driver simply has to ask the car's computer to turn the blinkers on or find a station on the radio and the computer will obey. "A car responding to voice already exists but the problem is one of cost, of marketing and of reaching 100 per cent reliability," a Renault official remarked. "You will never be able to drive a car by voice alone. But some aspect of voice command could be very useful."

The ability to turn a car radio on and select a specific station by voice alone could prove to be a significant safety asset. A recent survey of accidents on the Paris "Périférique" (the great circular road around the city) shows that more than 50 per cent of all accidents are caused by drivers not watching the road while they tune their car radio.

But if Renix is working on the leading edge of car electronics, its bread and butter is the volume production of electronic ignition systems, electronic transmission controls, and electronic fuel injection. This production, centred around Renix's manufacturing facilities in the south-western city of Toulouse is largely designed for Renault's own consumption. But increasingly Renix is looking towards marketing its products to other car manufacturers with the aim of eventually selling as much as 50 per cent of its products outside the Renault group.

"In the late seventies Renault became conscious that eventually electronics would invade the car. Renault could not do it on its own because it knew nothing about it. It thus decided to control directly an electronics company at the same time as being associated with a partner which could give the company the necessary know-how. This is how Renix was born," explains M Tillie. With Renix, Renault has now integrated car electronics in its overall manufacturing system just like the big U.S. car makers and the Japanese car groups.

Renault is now applying the Renix strategy to build up its expertise in other new car technologies. Barely a month ago it announced an agreement to set up for the first time a joint venture with a Japanese electronics company called Stanley to collaborate in liquid crystal technology for dashboard instruments. The plan is to construct a plant in France, produce liquid crystal dashboard instruments for Renault and subsequently market at least 50 per cent of production to other companies. Renault is also about to reach a similar collaboration agreement with a U.S. company in the application of high performing ceramics for car engines.

In its five short years of existence, Renix is turning into one of the big successes of France's often arduous attempts to create a modern indigenous electronics industry on the model of Silicon Valley. The fact that in the huge Renault car group Renix, from the start, had a major captive market has significantly helped. Without such a captive market the venture would probably never have got started.

Indeed, the venture has caused some acrimony in the European car supplier market with Renault being accused by some component manufacturers of raiding their market.

In five years, Renix has invested about FFr 150m, has seen its sales grow from FFr 79m in 1981 to FFr 335m last year and expects to see them reach between FFr 400-410m this year. It started making a slender profit in 1982 with earnings of FFr 2.5m increasing to earnings of FFr 21.4m last year. "If our American partners had some apprehensions at first, this performance has more than reassured them," says M Tillie on what so far has been a harmonious partnership.

Renix has proved a marriage of convenience for both Renault and Bendix. The U.S. company, now controlled by Allied, the U.S. chemicals and oil conglomerate, has been gradually moving out of the car electronics business as the Detroit car makers have developed their own inhouse electronics divisions. But through Renix, Bendix retains a foot in the engine electronics business while it retains a presence in brakes and anti-skid systems through its French DBA subsidiary. For Renault, Bendix provided the know-how to enable the French group to build up a large scale presence in the car electronics business.

Renault now accounts for about 70 per cent of Renix production with 20 per cent going to American Motors Corporation (AMC), the U.S. car maker 44.6 per cent owned by the French state company. The remaining 10 per cent of Renix production goes to Volvo which buys electronic ignition systems from the French company. By 1987, Renix hopes to sell 50 per cent of its production outside Renault with the other 50 per cent going to AMC and other car makers. M Tillie said talks were taking place between Renix with Peugeot, Fiat and Seat and were due to start soon with Saab. Volkswagen will soon become a Renix client. Renix has been chosen to develop the electronic transmission control for a joint VW-Renault automatic gearbox to be made at a rate of 2,200 units a day. "Production of this new gearbox is due to start at the end of next year," says M Tillie.

Renix, which employed just over 200 people in 1980, employed 879 people last year and expects to see its workforce grow to more than 1,000 people in coming months.

Renix opened its first workshop for the assembly of small sensors last October and has just opened a second workshop in the Toulouse area for the assembly of pressure sensors. It is due to open a second larger manufacturing facility at Foix, south of Toulouse this year to complement its Toulouse plant. It is also planning to open an engineering and research centre near Toulouse and has already set up this year a technical and commercial support facility in the U.S. largely to offer services to AMC but eventually to other groups in the U.S.

The current top management of Renix all stems from Renault. "If we started with Bendix know-how at the beginning, we now develop our system entirely on our own," says M Tillie. But while Renault is clearly now the dominant force in the joint venture, M Tillie claims Bendix is not just a sleeping partner. "Our board consists of eight members, with four from Renault and four from Bendix. A majority of six votes is needed on board decisions. I don't think you can call that a sleeping partnership."

Graphics

Computer helps design stage sets

BY PETER MARSH

FUTURE SOAP operas on BBC television may feature stage sets designed with the help of computers. The corporation's computer graphics workshop is assessing how the people who plan production sets could benefit from computer-aided design techniques used routinely in architecture.

A computer could help, for example, planners who need a specific kind of door or window for a play that takes place mainly in a house's living room.

With the hardware, the designer would call up from a database details about the items. For instance, he would discover if the artefacts are available from the BBC's central store.

The computerised technique would also help planners to work out the best ways of asembling sets from modular units such as standard panels for floors or walls.

Mr Bill Gardner, manager of the computer graphics workshop, says that the one-year study will see if it is possible to transfer to scenic design techniques employed in the system building of houses or flats.

The project is the most recent assignment for the workshop, which was set up four years ago and has a staff of 10. A key activity is the production of computer graphics to help in the reporting of elections.

In the few months before last year's general election, staff worked furiously to complete a package of graphics with which TV commentators could display and interpret results using 150 different animation sequences.

Mr Gardner's team is planning a similar, though more modest, effort to aid the interpretation of next month's elections to the European parliament.

The workshop offers its services to programme makers anywhere in the BBC—apart from the people who produce news reports who have generally produced their own graphics.

Mr Gardner says that demand for the workshop's time is increasing. In the past year, some 200 BBC programmes have featured sequences produced by the computer workers. The Money Programme, for example, is a regular user of computer animation.

The workshop's main tools are three "computerised paintboxes" made by Quantel, a British company that specialises in digital hardware for television. The paintboxes are part of £500,000 worth of computer equipment in the workshop.

The Quantel hardware features in the production of a three-dimensional sequence that is to form part of the opening credits for a new 26-part science fiction series, The Tripods.

To produce this kind of animation, designers first have to make a "storyboard"—a description of the key stages of the sequence drawn out on paper.

Details of the storyboard are fed into the Quantel computer, for example with a digitising tablet that converts pictorial information into a set of numbers. With specific commands, workers can assign to parts of the drawing particular colours. They can also arrange for objects in the picture to move in a set way.

The workshop has recently purchased software from CIS, a computer company in Cambridge, which will help in the preparation of new three-dimensional images.

Another series of products from Mr Gardner's department makes it appear that he is running a menagerie.

The ANT, EAGLE, OWL and DOG are not animals but acronyms for a set of supporting software used routinely in a variety of TV programmes.

For example, ANT stands for animated news title—it is a piece of typography that sometimes appears on viewers' screens during news programmes. DOG is "digitally orientated graphics" that comes into play when "action replays" are broadcast, for example during soccer matches.

Another set of software encapsulates the commands onto TV screens the message: "Do not adjust your set."

These computer commands are inserted into "black boxes"—small computer systems—which are handed out to people throughout the BBC who are responsible for broadcasts.

Astronomy

Moving telescope

ENGINEERS HAVE finished the task of transferring a telescope for astronomy from Copenhagen to the Canary Islands.

The Carlsberg Automatic Transit Circle, built in the 1950s by Grubb Parsons of Newcastle-upon-Tyne for the Copenhagen University Observatory, was removed to the island of La Palma because of the better observation conditions on this mountain site.

The telescope is now fully operational and has recorded the positions of 700 stars in a single night.

The instrument is part of a new international observatory on La Palma administered by the Instituto y Observatorio de Marina in San Fernando, Britain's Royal Greenwich Observatory and the Copenhagen University Observatory.

Robotics

Rubber 'muscles'

A ROBOT which uses rubber "muscles" and "hands" is said by its inventors to be more flexible than conventional machines for assembly line work.

Hitachi and Bridgetown Corporation's robot arm is controlled by compressed air. It can move into seven positions with the help of wire rope and pulleys, and can handle objects up to 6 kg in weight.

Production of the arm, which Hitachi says is lighter and smaller than existing robot manipulators, is due to begin shortly.

ENERGY REVIEW

California's oil euphoria wanes

By William Hall, recently in Santa Barbara, California

AS THE Pacific coast highway winds its way north from Los Angeles, old wooden piers begin to dot the coastline, supporting nodding donkey engines which have been pumping oil from underneath the ocean for as long as anyone can remember. But these days it is the recently arrived fleet of offshore rigs, stretching as far as the eye can see, which distracts attention from the *beautiful coastline.*

It is just three years since Chevron and Phillips stunned their competitors by putting in a record-breaking $333.6m bid, in federal offshore lease sale 53, for a nine square mile tract of prime offshore property in California's Santa Maria basin.

A year and a half later they confounded the sceptics and announced the discovery of the giant Point Arguello oil field 15 miles offshore—the most significant discovery in the U.S. since Alaska's Prudhoe Bay in 1969. The Santa Maria basin, was quickly dubbed the "hottest oil play" in the U.S. and a veritable armada of drilling rigs has been working round the clock ever since delineating the content and size of the discoveries.

However, the early euphoria which accompanied the discovery of Point Arguello and the more than half dozen other new fields has begun to evaporate and the drilling boom of the last couple of years is subsiding. While the oil companies are confident that there is plenty more oil to be found off California's coastline, moratoriums on both federal and state lease sales have sharply reduced the acreage available for exploration and permitting delays are slowing the pace of development of existing *discoveries.*

Although it is much less expensive and far easier, logistically, to look for oil a few miles off the Californian coastline than in the inhospitable Arctic environment, the U.S. oil majors are beginning to wonder whether the returns at the end of the day will be any higher. California's latest oil boom has its own special set of problems.

Most geologists now believe that when the Santa Maria finds are added to new discoveries in the neighbouring Santa Barbara channel and San Pedro bay, offshore California will have added at least 1bn barrels to U.S. reserves and probably considerably more in the years ahead. While this is still a far cry from the estimated 9.6bn barrels of recoverable oil and the 26 trillion cubic feet of natural gas found underneath Alaska's Prudhoe Bay, it is far larger than anything else being discovered. Given that the U.S. is currently replacing less than two-thirds of its production of 3bn barrels a year and its reserves are now below the 30bn barrels mark, offshore *California has become one of* the prime areas for offshore exploration as America searches for fresh reserves to quench an appetite which is once again rising rapidly.

California's offshire production of around 84,000 barrels a day currently accounts for less than 1 per cent of total U.S. production, but it is expected to grow to around 450,000 barrels a day within the next decade and the optimists are talking the figure up to 700,000 barrels a day.

Mr George Keller, chairman of Standard Oil of California, whose Chevron subsidiary has been very much the pacesetter in the offshore Californian oil rush, is one of the optimists, arguing that "the entire offshore southern California region promises to be a major area of exploration and production activity over the next decade."

"The favourable combination of low exploration risk and high potential for the discovery of significant amounts of crude oil and natural gas", is what attracted Chevron. Mr Keller is confident that new discoveries in the area will reverse its declining U.S. production. Chevron's commitment is reflected in its aggressive bidding for a total of 76 state and federal leases in the Santa *Maria basin and Santa Barbara* channel, more than any other oil company. All told, U.S. oil companies have spent close to $4bn for exploratory leases in federal waters off the Californian coast.

Oil men suspect that if they were given a free hand to look for oil off California the area might come close to matching petroleum basins like the North Sea or the Gulf of Mexico in terms of importance for the industry.

The U.S. Minerals Management Service, which supervises the leasing of tracts in the outer continental shelf (basically everything beyond the three mile limit), has estimated the existing offshore Californian reserves at just over 1bn barrels and suggested that another 4bn barrels could be found beyond the three mile limit which divides federal waters from state waters.

Yet for several reasons the oil industry is having second thoughts about the short-term importance of offshore California in their hunt for oil.

● Many of the most attractive offshore prospects have been declared off limits to the oil companies as California has been one of the areas hardest hit by the recent congressional "moratorium" on offshore lease sales. Last month's offshore central California lease sale (OCS 80), which covered some of the most attractive unexplored territory, has been put on indefinite hold. There was little interest in the previous lease sale, 73, since the U.S. Defense Department and California had succeeded in getting the amount of acreage cut in half. Meanwhile, the long awaited sale of leases in California state waters—covering the eight tracts between Point Arguello and Point Conception, which adjoin the huge Point Arguello Field and are believed to hold 200m barrels of oil—continues to be postponed because of a squabble between various California Government agencies. No new leases for exploring in state waters have been issued for 15 years.

Oil men are particularly frustrated that they are banned from exploring in the offshore area between San Clemente and San Diego, which according to Mr Hank Wright of Western Oil and Gas, the local trade association, is "the last remaining virginal area on the West coast which has a high, high potential."

● Permitting delays abound. Although it is over 15 years since the infamous blowout on a platform in the Santa Barbara channel, Californians have still not forgotten and the oil industry is paying the penalty.

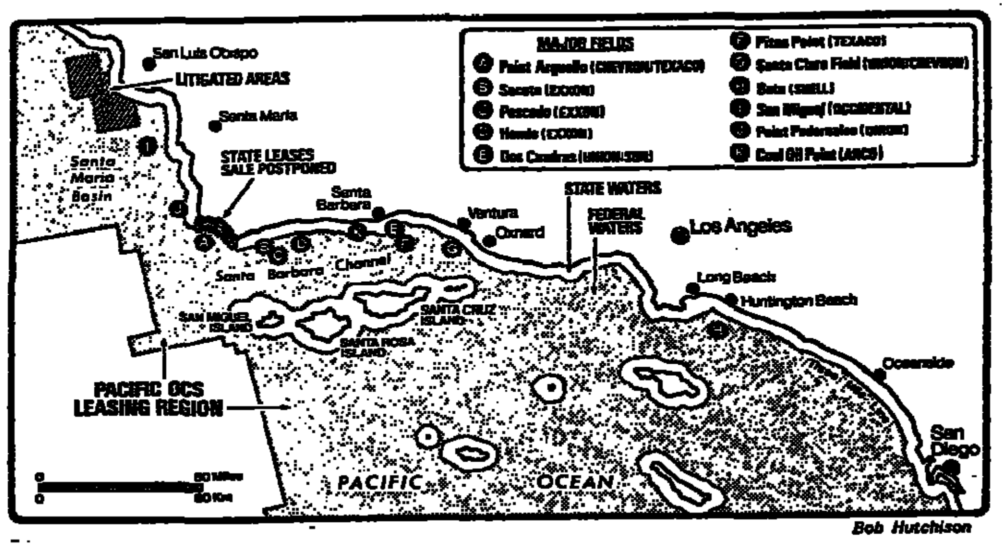
The oil industry argues that natural seepage of crude oil from the Coal Oil Point field off Santa Barbara discharges 22,000 barrels of oil a year, which is more than was spilt accidentally during a decade of activity in the heavily explored Gulf of Mexico offshore fields. Despite their belief that they are being treated unfairly, if past experience is anything to go by recent oil discoveries could suffer delays of up to a decade in their development. Exxon, *for instance, is only now* beginning to reap the benefits of its Hondo field, discovered at the end of the 1960s.

● The question of what is going to happen to California's new offshore production has still to be resolved. The first production from the Point Arguello field is scheduled to begin late next year or early 1986 and, while it will initially be transported by tanker, longer term decisions need to be made as to its deployment.

There is already a surplus of crude oil on the west coast as a result of Alaskan production and the new discoveries will add to the problem. At the same time there is a shortage of refining facilities for heavy crude oil and little prospect of this changing — especially since Los Angeles has adopted air quality laws designed to result in a 80 per cent reduction of local refining capacity over the next couple of decades.

The most obvious alternative is to take the oil down into Texas and Louisiana. But this raises the touchy issue of whether this should be done by pipeline or tanker.

California is probably the best example of the schizophrenic attitudes to offshore oil development in the U.S. California's 16m motor vehicles guzzle more than 11bn gallons of gasoline a year and demand is rising at a time when California's onshore production is declining. Yet Californians have been amongst the most successful in blocking fresh exploration off their shores.



Bob Hutchison

A GUIDE TO THE BIG FIELDS

AMERICA'S offshore oil industry was born in 1894 at Summerland, a few miles outside of Santa Barbara, when the first well was drilled from a wooden pier. Since then more than 4,000 wells have been drilled off California of which nearly 3,300 have been in shallow state waters close *to shore.*

The Minerals Management Service lists 14 fields in federal offshore waters of which only two, Dos Quadros and Carpinteria, located half a dozen miles off Santa Barbara, are fully developed. The most important giant fields which are presently being *developed* are as follows:

Point Arguello. Chevron announced the first strike in November 1981 and this was followed by a Texaco announcement in June 1982. The various partners are spending $2bn installing several platforms in water depths of up to 700 feet, some 65 miles north-west of Santa Barbara. Production is scheduled to begin late next year and at its peak could be flowing at 160,000 barrels a day. Reserves estimated at 500m barrels.

Santa Ynez unit. Operated by Exxon, the unit in the Santa Barbara channel consists of three fields—Pescado, Sacate and Government Point—in addition to Hondo. It is regarded as second only in size to Point Arguello with some estimates suggesting it might contain as much as 2bn barrels of oil, although Exxon puts its reserves at 400m barrels. The leases were acquired in 1968, but Exxon has suffered long delays in bringing the oil ashore caused by regulatory disagreements. The first platform was installed in 1976 but production did not begin until 1981. Exxon is planning to spend $3bn installing three more platforms which will boost output to 125,000 barrels a day.

Beta. Shell and Chevron are developing *this* field which is in San Pedro Bay, nine miles from Huntington Beach. Production began in 1981. The combined output is expected to rise to 33,000 barrels a day and reserves are estimated at between 200m and 300m barrels.

Coal Oil Point. Drilling the first exploratory well to be sunk in state waters since the lifting of the 12-year-old ban, Atlantic Richfield discovered this field, a few miles west of Santa Barbara. It is planning to produce 50,000 barrels a day from this field which has estimated reserves of 100m barrels.

THE ARTS

Television/Christopher Dunkley

Snooker has me in its pocket

I confess: like my mother before me, I am an addict. With millions of others all over Britain I find myself hooked. Melvyn Bragg's *South Bank Show* interview with Evan Hunter languishes on videotape, unwatched. Having resolved to review John Mortimer's play *Edwin* I sneaked away for a drop of the hard stuff after only 40 elegant minutes with Guinness (well, honestly, it did feel like 90) and somehow never get back to the play.

I had fully intended to watch the first of Desmond Wilcox's three documentaries about the Jews of the U.S.A. in *The Golden Land*, believing despite the anti-Wilcox campaign that he is still one of our most level-headed and interesting television reporters, but I managed only five minutes before my hand reached out . . .

In a sober moment I did see the first of Basil Davidson's *Africa* series on Channel 4, which, in the admirable habit of that channel, was not only interesting but passionate in its convictions. It was so desperately anxious to change what it assumed was my mind about black Africans, however, that in the end it did just the opposite. Anyone protesting this much must surely be suspect. If the similarity between the positions adopted by today's Nubian wrestlers and those depicted by ancient Egyptians is really the strongest sort of evidence to show that black Africa influenced Egyptian civilisation (which some of us had never realised was in contention) then the case seems a pretty shaky one. After all, every pair of wrestlers, east or west, ancient or modern, looks pretty much the same.

In similar gaps between benders I caught two other opening episodes on Channel 4. Given the rarity of poetry on television it is a pity to have to greet an entire series with less than joy but it did seem ill advised to begin *Six Centuries Of Verse* with the clear impression that poetry is something written in obscure language by men long dead, needing to be declaimed in round tones by solemn actors in rich surroundings.

Instead of putting off newcomers by proving that Chaucer needs sub-titles and Shakespeare wrote some pretty heavy stuff in "The Tempest" how much better it would have been to offer Larkin or Herrick as an appetiser and then Henry's Agincourt speech or even Macaulay's "Horatius" as proof of the way that poetry can stir the blood.

As for *A Way Of Being*, I watched because it had been promised that it would explain The Alexander Technique which is supposed to help the majority of us who suffer with periodic back ailments. But at the end of 45 minutes I had only the vaguest idea of what the Technique is: a cross between yoga and osteopathy.

No doubt my own back pain results largely from the slumped posture in which I indulge my addiction. It all began days and days ago with just one gin. I mean frame. It's the same every time, it seems to happen without my realising it: I decide to try just a single slug of the stuff and the thing I know it's one o'clock in the morning and the bottle, that is to say the screen, is completely empty.

The last thing I remember each time is David Vine in a Butlin's blazer promising that tomorrow there will be more, and then everything goes blank. The funny thing is, it's such tremendous fun while you're actually doing it that even though you wake up the next day with a headache groaning "Never again," the minute opening time comes round you're begging for more.

Steve Davis potting for the championship

What is it that makes BBC2's *World Snooker* quite so habit forming? As with most compulsive indulgences there is no single simple answer, all sorts of factors contribute, but perhaps the most important is the sheer length. The brief weekly ration of snooker dished by *Pot Black* holds very few attractions for me, and yet the annual springtime marathon seems irresistible.

Could it be something to do with what the police and psychologists dealing with kidnap sieges call "The Swedish Syndrome"? This describes the way in which captives cooped up for long periods with their captors invariably come to sympathise and even identify with them. The same phenomenon surely operates between soap operas and viewers: even if reason dictates that you should dislike these shallow characters and do nothing to co-operate with them, the human attachment to the familiar holds the viewer in thrall and strengthens the relationship.

The cast of *World Snooker* is much more rich and imaginative than that of *Crossroads*. From good old Uncle Ray Reardon at one end, the mild-natured one who smiles when he's down just as much as when things go well, to the tearaway Hurricane Higgins at the other extreme — and of course his challenger for the title of snooker's Streetwise Kid Of The Year, Jimmy White—they are an extraordinarily well mixed and entertaining bunch. Spend a few hours with them, and when you go back for the next ration, your own knowledge becomes an integral part of the enjoyment, just as the soap fan's detailed understanding contributes to the pleasure of watching *Coronation Street*.

Secondly, even though it is now a big money game (nothing could be more pathetic than the grey tobacco promotion men called out for the presentations on Monday night) snooker, on television at least, still maintains habits and standards which have disappeared from virtually every other sport. When Jimmy White missed an easy green for the second time on Sunday night to go 9-2 down against Steve Davis in the final, he was clearly dispirited: like a choirboy deprived of The Beano, his mouth curved down and he knuckled his eyes. What he did not do was roll around biting the carpet and pretending to the referee that he had been fouled.

Moreover, when Doug Mountjoy makes a particularly good shot you do not expect him to bound over and kiss Terry Griffiths. Snooker brings to television that atmosphere of civilised sportsmanship which was cultivated so keenly around the billiards tables of the Raj. One of the best things about televised snooker is that it isn't soccer and it isn't tennis.

Thirdly it is ideally suited to this medium. In 1969 when colour was introduced, so the story goes, one BBC producer was convinced there must be something which could now be done which had been impossible before, and after a week of racking his brains he woke in the night, punched his wife in the back and shouted "Snooker!" He could hardly have realised at that stage that he was not only right but that snooker would give viewers a unique advantage over the players by allowing them—thanks to the overhead shot—to see the possibilities sooner and clearer than anyone standing beside the table.

There is too, of course, the superb professionalism of the BBC's outside broadcast work. The standard varies slightly but I have not seen a single shot out of focus this year and the vision mixing has been masterly: the cutting from big close-up on the player's face conveying the concentration involved, to wide shot of the table to show the possibilities, to mid-shot on the moving balls to show the detail of play, to quick cutaways to the seated opponent to show reaction, has a narrative force lacking from all but the best drama.

Above all, the game itself is so subtle, so varied and so unpredictable: who could have imagined that after being 12-4 down at the end of the first night of the final White would come back to take six of the first seven frames on the next day? Indeed, who would have dared predict that two players of such contrast would face one another in the final: Davis, today's best all-round player, using tactics, strategy and endlessly cunning safety play to compensate for the infrequency of his big breaks; and White, the most exciting player, making up every frame as he went along, weaving round the table, doing magic with the rest and making impossible pots possible to build breathtaking breaks?

The final analysis may show that the addiction comes from a liking for the quantities of adrenalin which indulgence produces. However, you can have too much of a good thing: after Monday's wonderful knife edge final with White (looking like Richmal Crompton's William) storming back to take tailor's dummy Davis to an 18-16 finish, it will be good to go on the wagon for a while.

Shadowplay/Covent Garden

Clement Crisp

The return of *Shadowplay* as centre-piece of a new triple bill brings back to the repertory the finest of Antony Tudor's late ballets. When it was created for the Royal Ballet 17 years ago it seemed somewhat arcane; in this revival there are few uncertainties in its depiction of the Boy's journey to enlightenment through acceptance of his own animal nature and his "education" at the hands of a dominating male and a no less aggressive female.

The present cast was to have been led by Anthony Dowell, for whom the ballet was created. He is still suffering from an injury, and Wayne Eagling assumed the Boy's role, which he has danced excellently in the past, but to which he now brings greater expressive authority and a magnificent expansiveness in dance. Two other principals—Merle Park as the Celestial, Derek Rencher as the Terrestrial—were as potent as ever in their created roles. With them, and with Mr Eagling, the crisis of the ballet—Miss Park as destructive goddess held high; the Boy leaping beneath the arch of her legs down a colonnade of her minions to meet the challenge of the Terrestrial—was thrilling.

Shadowplay is a work infrequently given (this was only its 36th performance at Covent Garden), and one which benefits from the special nature implicit in this rarity of performance. Michael Annals' design remains ideal, and is admirably lit; the pertinence and merits of the Koechlin score were well argued by the Opera House orchestra under Barry Wordsworth.

There was an equally sure account of Poulenc's *Gloria* to accompany Kenneth MacMillan's threnody for the warriors and their womenfolk of the Great War. Led by the original and tremendous cast of Jennifer Penney, Wendy Ellis, Wayne Eagling and Julian Hosking, the revenants grieved and rejoiced and confronted history with their tragedy, and Mr Eagling's accusatory anger, Miss Penney's lyric stillness, were unforgettably fine.

Merle Park and Wayne Eagling

The triple bill, well contrasted in its elements, began with *Les Biches*. Alas, this requires much more care and assurance in its solo roles. The chorus of *jeunes filles en fleur* sport and frolic deliciously, but the principals need a greater sophistication of manner to show off their characterisations as Art Déco objects, stylised in line and bright-edged, and far removed from any common reality. Wit, Nijinska's devilish difficult choreography played with an amused mastery, are essentials in a work where high art and high camp meet. The women must think of themselves as dressed by Poiret or Chanel: it is symptomatic of the lack of elegance in performance that Marguerite Porter as the Hostess wore what looked like a pair of ruined plimsolls.

Real Estate/Tricycle, Kilburn

Michael Coveney

After a quick burst of the Sibelius violin concerto, things go rapidly down hill in this sleepy new play from Louise Page. By all accounts her *Salonika* at the Royal Court two years ago—was a touching, imaginative beach-play with ghosts, of the past jostling with the sadness of the present. As in that play *Real Estate* messes together four characters. In this case also the ghosts of the future unborn and of the past aborted loom large.

Jenny, a buyer of china who dresses in Jaeger, returns to visit her mother after 20 years. She is pregnant and wants to make contact. The mother, Gwen, suspects Jenny of merely wanting to take advantage of her. Gwen is a successful estate agent whose second husband, Dick, has taken early retirement. The father of Jenny's child is a divorced accountant, Eric, whose daughter Lotte threatens (from offstage) the stability of his relationship with Jenny.

Jenny has apparently returned to ward off a rubella scare by establishing that she has indeed had German measles. This innocent tactic is then overtaken by complications: Gwen and Dick lost their child as a result, Dick believes, of Jenny leaving home: "When Jenny went her womb let go." Jenny re-discovers her mother and moves in on the real estate business in order to get close to her.

The action takes place on a sloping autumnal set, nicely evoked by the paper hangings and grey twiggy floor space of Ellen Cairns and by the lighting of Andy Phillips, which times one cue to the overlaiden symbolic breaking of an egg. But the pace of Pip Broughton's production is relentlessly slow, interspersed with dreary Baroque music, and dreadful physical mistakes. The men in the kitchen for instance, peel mushrooms for lunch. Have you heard of such a thing? I merely wash and chop the brutes. Tony Guilfoyle as Eric is irritatingly wimpish, holding the knife in this scene by the blade. The final mother/daughter fall out is unbelievable, triggered by Jenny's callous encouragement of a gazumping operator.

Miss Page has some details right. When Jenny has an amnio-centhesis and names the baby, she touches on good feminine prerogative areas. But despite the competent presence of Glyn Owen and Brenda Bruce as the parental duo and of Charlotte Cornwell's flame haired, dead-of-night, poetic quality as Jenny, the evening just bumbles along as a dreary exposition of otherwise highly pertinent and topic themes. You get the impression of talents struggling to find correct modes of expression.

Capricorn/Wigmore Hall

Andrew Clements

Capricorn is celebrating the tenth anniversary of the establishment of the ensemble by presenting three freshly commissioned works. Two weeks ago it introduced a piece by Michaël Levinas; next Tuesday brings Zsolt Durkó's *Winter Music*. On Monday, sandwiched between Mozart's oboe quartet and clarinet quintet, was Barry Guy's *BITZ!* described as "10 pieces and 10 minutes of music."

The subtitle really says it all—a sequence of miniatures arranged symmetrically for three strings, three wind and piano. Guy's programme note revealed the piece as derived from a melody from his music-theatre piece *Songs from Tomorrow*, a set of variations on a hidden theme. Certainly in performance the links between the pieces are not easily grasped though the severe symmetry enforces its own internal coherence: relatively extended ensemble pieces to begin and end, their minuscule counterparts to provide the central axis, solos placed in the interstices. Some of these are aurally complementary—a bass clarinet solo over dry percussive sounds is matched by a thrummed violin solo surrounded by wavering thin woodwind layers, a cello solo is balanced by one for alto flute.

The cumulative effect, though, is rather less than the sum of the parts, which are engaging on a purely sonic level. Capricorn played it with a good deal of aplomb, as they did the rest of their programme—some commendably fluent and well marshalled Mozart, and a crisply forthright account of the suite from Stravinsky's *Soldier's Tale*.

Candy Kisses/Bush

Michael Coveney

As usual, John Byrne's own design for his riotously inventive, occasionally hilarious new play at the Bush is an indispensable extension of the text itself. We are in a Florentine *pensione* in 1963, the back wall draped as one of the inmates, a German picture restorer, works on a recently discoveed fresco. The action, conducted mostly *al fresco*, is bounded by a shrine to the Virgin Mary on the balcony, a neatly placed upper window, a hallway and a distant view of the city. Again, as usual, you marvel at how so much is achieved in so little space.

Mr Byrne shows little sign of exhausting his period memories, its popular music, or even, with the hindsight of 20 years, how funny we all were when caught measuring ourselves against the large events. The gallery of caricatures here includes a neurotic Manhattan Fine Art graduate (Carmen Du-Sautoy); a draft-dodging rabbity little egotist from the West Coast whom John Sessions plays with quite exhilarating panache as an adolescent Groucho; a couple of Celtic terrorists, Mark Lambert as the Irish Protestant, Freddie Boardley as flash Glaswegian, who are planning to assassinate the Pope; and a fanatical Welsh deputy head of church furnishings at a seminary college (Howell Evans) who is as devoted to the memory of Mussolini as he is, rather oddly, to that of Pope John XXIII.

It is one of the neat tricks of the piece that the replacement of the ecumenical Pope with his cold-fish successor is, eventually, tied in with the death of President Kennedy, and the Italians' sense of loss paralleled with the shattering blow to the American morale by the news from Dallas. This reaction of a nation is embodied in the endlessly confessional outbursts of the draft-dodger and, as you would expect, recycled as a comic weapon.

The proceedings are loosely supervised by the black-shawled Irish landlady of Peggy Marshall. Quite apart from engineering some splendidly farcical situations, Mr Byrne has great fun exploiting the language barriers between a stage full of people all ostensibly speaking English. Robin Lefevre directs with some aplomb and much glee, as well he might. However, one or two dialogues need drastic cutting. But *Candy Kisses* is a sure sign that John Byrne is strengthening and deepening his stage art, without losing any of that affectionate wryness about the past he has lived which is the motor — and mother — of his invention.

Carmen du Sautoy and John Sessions

Makarova in 'On Your Toes' at the Palace

Natalia Makarova will star in the Rodgers and Hart musical *On Your Toes* which will open at the Palace Theatre on Tuesday June 12 with previews from May 31. She will repeat her Tony Award winning performance as Vera Baronova in the show, which also won the 1983 Tony Award as Best Revival.

Ninety-six-year-old George Abbott, who co-wrote *On Your Toes* and who directed the original production, will come to London to oversee this production.

Arts Guide

Music/Monday. Opera and Ballet/Tuesday. Theatre/Wednesday. Exhibitions/Thursday. A selective guide to all the Arts appears each Friday.

May 4–10

Theatre

LONDON

Loot (Ambassadors): Leonard Rossiter is a wonderful Truscott in Jonathan Lynn's enjoyable revival of Joe Orton's farce in which a leading role is played by a mummified corpse. The versatile Gemma Craven plays the Irish nurse who is open to offers and party to crime. (836 1171).

The Aspern Papers (Haymarket): Vanessa Redgrave and Wendy Hiller give superb performances in Michael Redgrave's 1959 version of Henry James's story. The inquisitive scholar who descends on their Venetian palazzo is played, ponderously, by Christopher Reeve. (930 9832).

A Streetcar Named Desire (Mermaid): Sheila Gish gives the performance of her life as Blanche Dubois in Alan Strachan's excellent revival, first seen last year at Greenwich. Tennessee Williams's emotional roller-coaster of a play amounts to one of the best evenings in town. (830 6123).

Little Shop of Horrors (Comedy): Campy off-Broadway import which is less good than The Rocky Horror Picture Show but which has a curious charm, a full-blown performance from Ellen Greene and an exotically expanding man-eating prickly plant. (930 2578).

Pack of Lies (Lyric): Judi Dench in a decent, enthralling play about the breaking of a spy ring in the suburban Ruislip of 1959-60. Hugh Whitemore's script cleverly constructs a drama about betrayal from the friendship of neighbours. The story is based on fact and well directed by Clifford Williams. (437 3686).

The Real Thing (Strand): Susan Penhaligon and Paul Shelley now take the leads in Tom Stoppard's fascinating, complex, slightly flawed new play. Peter Wood's production strikes a happy note of serious levity. (836 2660/4143).

Daisy Pulls It Off (Globe): Enjoyable romp derived from the world of Angela Brazil novels: gym slips, hockey sticks, a cliff-top rescue, stout moral conclusion and a rousing school hymn. Spiffing if you're in that sort of mood. (437 1592).

Noises Off (Savoy): The funniest play for years in London, now with an improved third act. Michael Blakemore's brilliant direction of backstage shenanigans on tour with a third-rate farce is a key factor. (836 8888).

CHICAGO

E. R. (Forum): Moving into its second year parodying melodrama in a hospital setting, this emergency room continues its adventures among a young doctor, a receptionist and an authoritarian nurse. (496 3000).

NEW YORK

Cats (Winter Garden): Still a sellout, Trevor Nunn's production of T. S. Eliot children's poetry set to trendy music is visually startling and choreographically feline, but classic only in the sense of a rather staid and overblown idea of theatricality. (239 6262).

La Cage aux Folles (Palace): Perhaps this season's outstanding musical comes, like Evita and Cats before it, at the very beginning of the theatrical year. Despite stellar names such as Harvey Fierstein writing the book and Jerry Herman the music, the best parts of the show are not the hoopla, apart from the first-act finale a la Gaîté Parisienne, but the intimate moments borrowed direct: An immodest celebration of the heyday of Broadway in the '30s incorporates gems from the original film like Shuffle Off To Buffalo with the appropriately brash and leggy hoofing by a large chorus line. (977 9020).

42nd Street (Majestic): An immodest celebration of the heyday of Broadway in the '30s incorporates gems from the original film like Shuffle Off To Buffalo with the apropriately brash and leggy hoofing by a large chorus line. (977 9020).

Torch Song Trilogy (Helen Hayes): Harvey Fierstein's ebullient and touching story of a drag queen from backstage to loneliness incorporates all the wild histrionics in between, down to the confrontation with his doting Jewish mother. (944 9450).

Dreamgirls (Imperial): Michael Bennett's latest musical has now become a stalwart Broadway presence despite the forced effort to recreate the career of a 1960s female pop group, a la Supremes, without the quality of their music. (239 6200).

Nine (46th St): Two dozen women surround Sergio Franchi in this Tony-award winning musical version of the Fellini film 8½, which like the original celebrates creativity, here as a series of Tommy Tune's exciting scenes. (246 0246).

Noises Off (Brooks Atkinson): Dorothy Loudon brings Michael Frayn's backstage slapstick farce to Broadway in Michael Blakemore's production that includes Brian Murray, Paxton Whitehead and Victor Garber as her backstage conspirators. (245 3430).

BRUSSELS

The School For Scandal by Sheridan, directed by John Barton and starring Donald Sinden, Dulcie Gray and Googie Withers, is presented by the British Council at Passage 44.

TOKYO

Cats (Cats Theatre). The specially built tent theatre, excellent set, good dancing and Kabuki-originated movement all make the Japanese version worth seeing. Shiki company, directed by Keita Asari. (320 1001).

Kabuki: Mumazu, Sonezaki Shinju or Double Suicide at Sonezaki (Kabuki-za). One of Chikmatsu's most famous plays based on a true incident. English programme details, simultaneous earphone commentary. (541 3131).

Kabuki: Go-biki Tsunagi Uma, or Pulling the Tethered Horse (Meiji-za). This production is reputed to have cost Y10m (544,000) and tells the story of a man who disguises himself as various warriors, and a spider in order to avenge his father's death. (667 5151).

Chekhov's Three Sisters

RONALD HOLLOWAY

Everything that's been written about Peter Stein's production of Anton Chekhov's *Drei Schwestern* (Three Sisters) at the Schaubühne am Lehniner Platz in West Berlin can be confirmed. This is, indeed, a milestone in contemporary West German theatre.

Often, in the case of Stein and the Schaubühne Ensemble, the praise is reserved for his interpreting skills, rather than his powers of direction; and for their collective stance in delivering the goods.

Interpretation, direction and performance all blend into a splendid four-hour Chekhovian evening in "Three Sisters." It is as though Stein has gone beyond the play to read the author's mind. Only one other theatre production in West Germany has impressed me in this manner: Samuel Beckett's own interpretation of *Waiting for Godot*, staged in 1975 at the Schiller Theater in Berlin. In Beckett's case, an authentic Godot was welcomed after so many amateur attempts by West Germany's theatrical gentry. Stein's has wiped the slate clean after far too much tinkering with Chekhov's unique, quiet, sensitive, tragic and witty caring for the foibles of humanity.

This season has seen a wave of Chekhov productions, but I predict that the Stein Chekhov "Three Sisters" will cause a pilgrimage from the "mainland" of West Germany and the rest of Europe for most of the present decade, unless the Schaubühne Ensemble goes on tour in the future with this prestigious cultural attraction. It is already the *sine qua non* of the Berliner Theatertreffen next Month.

Perhaps the reason why Stein succeeds so magnificently is because Moscow – the dream of the three sisters – is left clearly in the distance. Thoughts, after all, make for better drama than yearnings. So, when Irina talks of finally pulling up stakes and leaving, her reactions in the presence of her older sisters show that she never could.

When Olga laments that no one has ever asked for her hand as the oldest, one only has to look out of a corner of an eye at Masha to note what a mistake it is to accept on impulse. If that's not enough, there's the humiliating sight of the hope of the family, Andrei, docilely pushing a pram through the garden.

Stein bares every emotion on the face of every character on stage – often the entire ensemble at once – during the endless string of solos and headstands as people struggle at times simply to be listened to. A wonder happens at the Schaubühne. The fourth act transcends theatrical effect (as it's supposed to) simply because all these misfits have captured our sympathy.

"Three Sisters" moves at a leisurely pace. "Time" is at the core of Stein's concept: what happens, or doesn't happen, is so normal and typical, and regulated by human nature, that tragedy creeps in unexpectedly. Olga (Edith Clever) marks time in the listless carriage of her body and in empty gestures that attempt to complete a choked sentence. Masha (Jutta Lampe) briefly quells the passage of time in her romantic bosom by espousing an illicit love; yet this only sets the scene for a dramatic moment when the self-centred colonel finally departs as expected.

Irina (Corinna Kirchhoff) marks the curve of time (about four years) with the disintegration from child-sprite to defeated maid in gradual stages of visibly excruciating resignation. The other characters in the play are the villians of the piece: they use the provincial household merely to pass the day or night. In each of the acts, shadows move across the floor, candles flicker against encroaching darkness, the night grows longer and longer without rest, or autumn gives way gradually to winter. The losers are those who perceive this passage of time.

The sets are the best Karl Ernst Herrmann has created in his long association with Peter Stein at the Schaubühne. The sun-splashed drawing room in the first act gives the effect of the audience sitting on the veranda and catching overlapping conversations, sometimes spoken ever so softly, at a glance or turn of the head. One could return to the same theatre the next evening, take a different seat, and "look over the shoulders" of other members of the Prozoroff family and acquaintances by almost personal choice.

In the final act, the audience looks down a row of gigantic trees to a rolling pastoral meadow, a visual component of the "time will pass" line on Olga's lips in the closing monologue. As the three sisters cluster to console each other against this landscaped eternity, the image freezes into a modern mythical variation on the three angelic creatures in Andrei Rublev's masterful painting of the Old Testament Trinity.

This final scene also recalls the set design Stein and Herrmann created for the Schaubühne's 1976 production of Maxim Gorki's *Summer Folk*: rows of birch trees encircle a summa dacha. *Summer Folk* was the dress-rehearsal for "Three Sisters" – many of the same actors and characters have now matured into a dramatic synthesis of life itself.

FINANCIAL TIMES
BRACKEN HOUSE, CANNON STREET, LONDON EC4P 4BY
Telegrams: Finantimo, London PS4. Telex: 8954871
Telephone: 01-248 8000

Wednesday May 9 1984

Shadow of the U.S. deficit

ALTHOUGH the money supply estimate published yesterday was good enough to take some pressure off money market rates and so hold off a decision on clearing bank base rates for *a few days more, the odds* still seem to favour a rise before the week is out. Such a rise, combined with reviving militancy spreading from the coalfields to British Leyland, will be something of a blow to business confidence. If the financial and labour news remains unchanged, it could be a direct blow to economic activity as well. Are the financial markets responding rationally to signs of a potential rise in *inflation* at home—as is also suggested by the recent increase in producer prices — or are we suffering from an imported American virus?

The pessimistic view of the UK economy certainly cannot be dismissed out of hand. The trend of private sector wage settlements has for some time suggested that the recovery in demand might work through to prices, and *this* is now happening. It is still an open question whether this is the beginning of some self-generating spiral, or simply a once-for-all recovery in margins previously depressed *by the recession, but there are* at least grounds for caution.

Equally, it is far too early to conclude that the new dispute at Longbridge is the start of a new trend; the desperate drive for efficiency there has built up special local resentments. On the whole, pay settlements have been remarkably stable against a background of sharply recovering profits, though at all times rather too high for comfort.

Realisation

The markets have also been inclined to read a warning in the revival of house prices. Here again, though, there are some special factors at work. Apart from the sluggish responses of the building societies to falling interest rates elsewhere—which could now prove a wise realisation that the fall might be temporary—the societies have a special motive for raising their mortgage lending. The decision shortly before the Budget to tax their dealing profits on gilt edged has led them to seek to shorten their portfolios and lend the proceeds.

The jury is still out, then, on the real economy. It would *certainly* be very depressing to conclude that an economy with three million unemployed and working far below full capacity cannot sustain a small acceleration in growth without overheating. The authorities have *done nothing to push rates up,* and we would not at this stage be urging an application of the brakes on non-monetary grounds.

Monetarists

It is the figures for bank lending, and above all the weakness of the sterling exchange rate which most directly justify the market's feeling that rates must rise. The worries about credit have persisted for some time among those who are not doctrinal monetarists. In their view, monetary control is a form of credit control. An official policy which seeks to offset rapid credit growth by overfunding, or by constraining the banks to acquire large additions to their reserves, seems at times like sleight of hand.

The official answer is first that *liquidity is indeed the relevant* measure; so long as borrowing is financed by long-term saving, whether through funding or by the banks themselves, it is not inflationary. The Treasury takes *a particularly relaxed view of* personal saving, arguing that personal borrowers will naturally limit their borrowing when the repayment burden becomes onerous. Personal borrowing is seldom forced, and the sector has a good credit record. Indeed, the present personal borrowing boom—the first largely unconstrained growth experiment in many years—is the main reason why the domestic economy is recovering.

What is beyond question is that American conditions are a major factor in what is happening in London. The European monetary authorities appear to have decided to uncap the dollar for the time being, but this does not prevent Wall Street rates exercising a strong pull; indeed, switching into dollars may help to explain why the non-monetary offsets to credit growth in April were so large. The bond market exercises a more direct pull, since exchange rate expectations have only a diluted influence, and help to make funding more expensive everywhere. U.S. policies, based on large deficits and money policies tight enough to arouse monetarist objections, are importing savings and exporting *inflation to the outside world.*

Mr Botha's visit

AT FIRST GLANCE it is hard to see what Mrs Thatcher thinks she will gain by inviting Mr P. W. Botha, the South African Prime Minister to visit her in London next month. She can reasonably argue that to meet a government *leader* is not to condone his policies—and she has already invoked the example of contact with the Soviet leadership to reinforce this point. Her problem is *that perceptions may simply* refuse to conform to this reality.

Mr Botha's visit will be the first by a South African premier since Dr Hendrik Verwoerd, the chief architect of apartheid, *came to the UK in 1961 to seek* support against the campaign to expel his country from the Commonwealth. It will thus be charged with a symbolic importance that will defy logic.

In the UK, it will be the pretext for further protest and demonstrations against the policies of the Conservative Government. Coming on top of the insignificant, but highly visible decision to grant UK citizenship to a young South African athlete, Miss Zola Budd, it will be pounced upon in the Third World as evidence that Mrs Thatcher is soft on apartheid. In South Africa itself *Mr Botha's ability* to arrange a European tour will be regarded as proof that his Government's changes in the South African constitution and rapprochment with neighbour*ing black African states* are rehabilitating South Africa in the eyes of other Western countries.

Question

The gains which will make such misconceptions worth enduring are less obvious than usual. South Africa needs no outside encouragement to remain steadfast in its opposition to Soviet expansionism. There is already adequate contact at ministerial level between the UK and South Africa to avoid any misunderstandings between the two governments. Trade and investment links between the UK and South Africa do not need any bolstering.

Yet Mrs Thatcher's Government found itself posed not with the question "why?" but with the question "why not?" It appears that Chancellor Helmut Kohl of West Germany, who faces a more deeply committed pro-South Africa industrial and political lobby than does Mrs Thatcher, had already decided to receive Mr Botha on his European tour. Visits to Portugal and Switzerland were scheduled as well. Under these circumstances it would *have been counter-productive* for Mrs Thatcher to have gone it alone in preserving the top level ostracism of the past 20 years.

At odds

It would also have been too visibly at odds with the policy of so-called "constructive engagement" espoused by the present U.S. Administration. This amounts to a carrot-rather-than-stick approach in seeking changes both in apartheid and in South Africa's relations with its neighbouring African states.

It is hard to argue that this approach has been sterile, *for it* has coincided with important changes in both areas. The referendum approving constitutional change in South Africa confirmed a more liberal tinge in the white South African political consensus. There has been a non-aggression pact between Mr Botha and President Samora Michel of Mozambique. There are also hopeful signs of moves towards a peaceful settlement in Namibia, with talks arranged between the South West African People's Organisationa (Swapo), the principal nationalist movement, and South African officials.

Mrs Thatcher will now have to make clear her attitudes to these developments with words in place of aloofness. She will have to criticise a constitutional reform which, while giving coloured and Asian South Africans the vote, also reaffirms that Black South Africans, the overwhelming majority, remain constitutionally excluded from the democratic process.

She will have to urge Mr Botha to follow up the improvement in relations with neighbouring states by giving Namibia its long-promised independence. She will have to convey to a premier who has been able to travel only seldom that these are the attitudes of a Conservative government as firmly opposed to socialism as he is. She will have to do all this publicly, as well as privately, so that no one is left in any doubt as to what her government's attitude to South Africa really is.

FOREIGN AFFAIRS

Will Mrs Thatcher (left) follow the lead of President Mitterrand (centre) and Chancellor Kohl?

Europe's political future: a new agenda takes shape

By Ian Davidson

MRS THATCHER has about six weeks to decide whether she wishes to have a European policy.

At the moment, she appears to feel no such need: her ideas on the subject of Europe seem limited to the important yet essentially secondary notion of struggling against those entrenched practices of the European Community which are either undesirable in themselves or at variance with British interests.

On the Continent, by contrast, a much larger debate is stirring on the political future of Europe. Of this, there is as yet no sympathetic echo from London; not for the first time, Britain seems either unaware, or sceptical, of aspirations which are setting up powerful vibrations across the Channel. Whereas Professor Walter Hallstein, first Commission President, used to say "Our business is politics," Mrs Thatcher seems to imply that her politics is business.

In one sense, there is no immediate hurry. It is customary to deplore the apparently childish obstinacy with which Britain and the Nine are baulking at a final compromise on the mechanisms to limit Britain's excess contribution to the Community budget. Everybody knows that the negotiating gap left by the Brussels summit seven weeks ago was extremely narrow; certainly not wide enough to call in question the inevitability of an eventual agreement on the final chapter *of the most important package* of reforms in the Community's history.

So why not get it over and done with, and move on to the more important issues of the future, starting, but not ending, with the structural problems of the European economy? There is after all no objective reason why a deal could not be done today, or tomorrow.

Who knows, perhaps it will be done today, or tomorrow, or the next time Mrs Thatcher meets President Mitterrand. But with the passage of time it begins to look as though there is a tacit understanding not to make the final deal, or at least not to reveal it, until next month's European summit at Fontainebleau. The case for such delay is that the elections to the European Parliament take place ten days before the summit.

All ten governments can expect, in varying degrees, a backlash from rural voters, as a result of these first steps in *curbing the wastefulness of the* agricultural policy which have already been agreed and announced; none will now wish to expose itself to accusations of having made a further sacri*fice of national interests.*

In France, moreover, the European elections are being seen as a virtual referendum on the general standing of the socialist government. Neither *President Mitterrand, nor any* of the other eight, will wish to be charged with having made the final capitulation to the narrow but inexorable demands of the iron lady.

Similar considerations apply to the debate on the political future of Europe. The French and the German governments are both determined to place this larger issue on the agenda, as soon as the financial and farm-policy reforms are wrapped up, and they are working together to co-ordinate their views on how it should be formulated and presented to the other eight member states.

As of now, their ideas are still not finalised; but in any case the German Government, at least, does not want the highly-*charged issue of Europe's political* future to become a campaign football before the first serious discussions *à Dix.*

This may seem perverse and undemocratic. After all, if direct elections to the European Parliament have any meaning, they should be particularly relevant to the political future of Europe. The trouble is that the Germans do not yet have hard and fast proposals; they are uncertain of the likely reaction of the other member states; and some of the issues

Germans now attack the Gaullist legacy

likely to be raised by the Germans are highly controversial, not to say explosive.

Of the Ten, at least three—Denmark, Greece and Ireland—could well prove recalcitrant at any attempt to strengthen the political dimension of the European Community. The German Government asserts that it will not accept that the Community's progress should be restricted to *the speed of the slowest vessel:* there can be no veto by anti-federalists, fellow travellers and neutralists. If progress can only be made on the basis of Franco-German cooperation, at *least at first,* then so be it.

On the other hand, this is obviously not an optimum solution. Many people believe, and the French for questionable motives have *often* asserted, that the Franco-German axis is bound to be the core of any political evolution in western Europe. But it is no substitute for a wider consensus on Europe's political arrangements, and despite the genuine determination of both governments to strengthen their mutual links, the structural geo-strategic tensions within the Franco-German relationship would be much easier to resolve—perhaps can only be resolved—in a larger grouping.

These geo-strategic tensions derive from France's long-standing claim to a privileged place in the European constellation, free from the political commitments and operational obligations of the other members of the Atlantic Alliance.

When General de Gaulle withdrew France from military integration in Nato in 1966, he was shamelessly trading both on the solidarity of the rest of the Alliance under the ultimate guarantee of the U.S. nuclear umbrella, and on the post-war reluctance of the Germans to make a fuss.

Time has passed. De Gaulle has been succeeded by a socialist President; the credi*bility of the American nuclear* guarantee has been questioned, by Europeans and Americans alike, as a consequence of Soviet attainment of nuclear parity with the U.S.; the French have become alarmed by the way the Euro-missile crisis has apparently shattered the defence - policy consensus in Germany; and it is the French who are now pressing for closer defence co-operation in Europe.

The paradox is that the melting of the Gaullist ice-jam has released long pent-up resentments in West Germany against its closest European partner. In the 1950s and 1960s, for reasons of war-guilt and for the sake of political rehabilitation, the Germans were prepared to swallow their anger at France's reckless pride in playing fast and loose with Atlantic solidarity; and in those days they had no doubt that Washington was a more reliable ally than Paris, and a more effective guarantor of German security.

But now that Washington's reliability is beginning to be called in question, and now that France is showing unaccustomed anxiety over the volatility of German political opinion, the Germans are beginning to feel free to say those things about the Gaullist legacy which for so long they have bitten back.

Under President Mitterrand, France has already moved an immense distance away from the unadulterated egocentricity of Gaullism.

The 1963 Franco-German friendship treaty, originally designed to stifle German objections to the Gaullist veto on British membership of the European Community, has been given new life with the activa*tion, 20 years later, of* the provision for joint consultation on defence questions.

It is France which is pressing for the re-vitalisation of the Western European Union defence treaty, which links Britain and the six founding members of the European Community. And the new French plan for a five-division *Force d'Action Rapide* is clearly *intended to make it possible for* France to participate with the other Nato countries in the forward defence of Germany—if the President on the day so decides. (Under existing arrangements, the first French army astride the Rhine at Strasbourg, is, at best, a reserve for the rest of Nato, at worst the guarantee of the French sanctuary.)

No doubt the Germans are grateful for this evolution in French thinking, but they make it clear that they expect quite a lot more movement on the French side. Listen to the words of a pivotal official in the Bonn Government: "There is a pre-condition: closer security co-operation depends on closer political co-operation." Or again: "We want to avoid three strategies in Europe: the strategy of Nato, a strategy for Western European Union, and a strategy for France." Or

Characteristic, but beside the point

again: "The nuclear powers have special responsibilities towards the non-nuclear powers; we cannot accept that France and Britain should stand pat on total sovereignty and national independence."

When decoded, the message is pretty tough. Top priority for the German Government is the maintenance of Nato solidarity. It is interested in strengthening the European pillar of the Alliance, but not at the expense of the broader alliance. It is not automatically persuaded that Western European Union is the right vehicle, *but in any case France must* be more deeply committed to the common defence than Gaullist doctrine, which remains the rhetoric of the French socialist government, has traditionally allowed.

The German Defence Ministry puts a rather more up-beat gloss on the progress already made in the Franco-German military consultaions, though it is clear *that there has been some pretty* plain speaking.

"We are starting to exchange views," says a senior official, "on the French definition of their vital national interests. We ask them whether they regard West Germany as a military glacis to gain time, or as part of their vital national interests. . . .

"We have achieved a large measure of common thinking on these issues, and surprising progress towards clarity on the philosophy of nuclear strategy. . . .

"There is a considerable change in the mental attitude of the French — they now appreciate that in the event of a war in central Europe, the battle for Germany would also be the battle for France. There is no need for a grand renegotiation between France and Nato — perhaps some pragmatic adjustments."

But in unofficial encounters, the tone can be much sharper. At a private European conference over the weekend, a German professor said: "The main question is, where are the French forces and French nuclear weapons? If they are the wrong side of the Rhine, that is hard to explain to German public opinion." A very distinguished Dutchman said: "With Germany as Europe's paymaster, and with France in its defence sanctuary, you have the death knell of Europe."

At the end of the discussion, an eminent Frenchman long associated with defence issues remarked that he had never heard such brutal comments on French policy.

It sometimes seems as though the French Government's *interest in European* defence questions is primarily motivated by a desire to promote more collaboration in arms procurement; if so, the Franco-German relationship is not enough.

The two governments have reviewed a long list of possible weapons projects—and have concluded that the costs are too great unless they are shared by a larger number of countries, *including Britain.*

Yet it is clear that weapons procurement and military strategy are not independent issues in separate, water-tight boxes: any far-reaching European programme of arms procurement is bound to raise questions of strategy, questions which are in any case raised by the common desire to shift the balance of deterrence in the direction of more *sophisticated* conventional weapons.

British reservations about the desirability of resuscitating the somnolent institutions of Western European Union are *absolutely* characteristic, and absolutely beside the point.

The questions being raised explicitly by the Germans, and implicitly by the French, concern the most fundamental *issues of Europe's political* structure. There are no magic blue-prints; the agenda is wide, and wide-open; the choice of forum is at this stage irrelevant, except that it should *include all those countries* which ought to be interested in the questions. The debate now fermenting on the Continent will only be influenced by those governments which feel the need for a European policy.

Men and Matters

Leslie on the Barclays bridge

There is no question who comes out best from the bewildering string of appointments announced by Barclays Bank. Peter Leslie, the urbane international banker, has won the key new job of chief general manager of the soon-to-be-merged foreign and domestic bits of the bank.

He will be "the man who drives the ship" in the elaborate power structure created by Sir Timothy Bevan, the chairman.

However, Sir Timothy will continue to be the chief executive officer and, as such, will be the only clearing bank chief to combine those roles.

Leslie was keeping a low profile yesterday, so low that he wasn't even taking calls, apparently to avoid undiplomatic utterances at the finish of one of the City's most closely watched horse races. But a colleague described him as "a very efficient bloke."

He joined Barclays DCO in 1955 and spent many years in Africa before rising through the upper echelons in London and emerging at the top of Barclays Bank International in the 1970s. Then last year he became general manager for finance and planning, a job in which he not only had to manage Bar*clays' £60bn balance sheet* but stage manage the forthcoming merger, Parliamentary Bill and all.

To City Kremlinologists, though, the changes yield revealing clues to the future leadership at the UK's largest bank. With Sir Timothy due to retire in only three years' time, his successor must be among those promoted yesterday. At 53, Leslie could be chairman for four years before reaching Barclays' retiring age of 60.

"Look! The water's so clean you can see the smoked salmon left-overs from the Thames Barrier ceremony"

. . . and bank cover-up

Short skirts and make-up were much in evidence yesterday among the 50, mostly British female staff at the City of London office of Bank Melli Iran.

The majority of those who felt liberated enough to talk to reporters said they were indignantly refusing to comply with their employer's edict to adopt *the "modest attire"* appropriate to the principles of Islam.

"Every now and then they try to make the place more Islamic and it may be they are trying to ease women out altogether. They have tried in the past to get us to cover up our arms but we just ignored it," said Robyn Williams, a 29-year-old employee outside the Moorgate office.

The state-controlled Iranian bank wants its women to cover heads, arms and wear "minimal make-up." In response to callers, male managers yesterday kept their heads down and their lips sealed as the Banking, Insurance and Finance Union, created a storm of unwelcome publicity.

BIFU, which is not recognised by the bank, claims to represent about one-quarter of the staff—and says the figure is rising as a result of the row.

As the union held a meeting *to bolster members' confidence* in a nearby pub at lunch-time, four women from the Iranian embassy held a counter-demonstration in favour of Islamic fundamentalism. They waved placards bearing pictures of Ayatollah Khomeini.

The union says it will consider industrial action if any staff member is sent home for refusing to conform.

But a noon deadline set by the management yesterday passed without incident.

The original directive for more subdued female attire came from the Tehran head office, and the London managers are thought to be referring the problem back in time-honoured executive fashion.

Untrue blues

Cambridge is still, apparently, a name with a cachet—in spite of the university's performances in recent boat races.

On the Melbourn science park, an industrial estate which, geographically, speaking, marches with Royston, Hertfordshire, rather than Cambridge, Cambridgeshire, a number of competitive companies are insisting upon being allowed a Cambridge address.

That is in spite of Post Office protestations that they are bending latitude and longitude to suit their commercial ends. One company, Biotek Systems, runs a sales distribution service of high technology equipment. Colin Hilder, managing director, explains what is in a name: "Cambridge is a well-known city overseas and it has kudos. The name Cambridge has definitely helped us achieve an immediate rapport with overseas customers."

He adds, "One of the first things we are asked is where we are from. And it seems to be *taken as an indicator of whether* we are viable or not."

Another company insisting upon a Cambridge address is EBM Advanced Technology whose managing director, Ted McMull[illegible], says, "Cambridge is recognisable anywhere in the world, and there are few other places in Britain that you could say that about."

I asked the Post Office: surely the solution would be to give the customers what they want? "No" says the PO sternly. "Changing the post town from Royston to Cambridge would add to our expenses."

McBurnie's market

[illegible] McBurnie, who leaves United Glass soon to take over as the new director general of the Institute of Marketing, believes fervently in the force of marketing as the next step out of the recession.

McBurnie, 54, says he is worried by those *companies* who believes that after *four* years of cost cutting and streamlining their manufacturing operations, that they can now sit back and simply reap the benefits. "The market place is even more competitive now—both at home and abroad—and unless companies get their marketing strategy right, then their sacrifices of the past few years will have been in vain."

McBurnie brings with him to the job an impressive track record in the marketing world. He held marketing jobs with ICI and Mullard before joining United Glass in 1965 where *probably his biggest achievement* was spearheading the dramatic growth of the Ravenhead Glass tableware operation.

He takes over an institute whose fortunes have improved *significantly* under the 12-year stewardship of retiring director general, Peter Blood. McBurnie, however, believes that the time is now ripe to build on this sound organisation and preach the marketing *gospel* in a more practical way.

Observer

THE AEG REVIVAL

Learning to cope with success

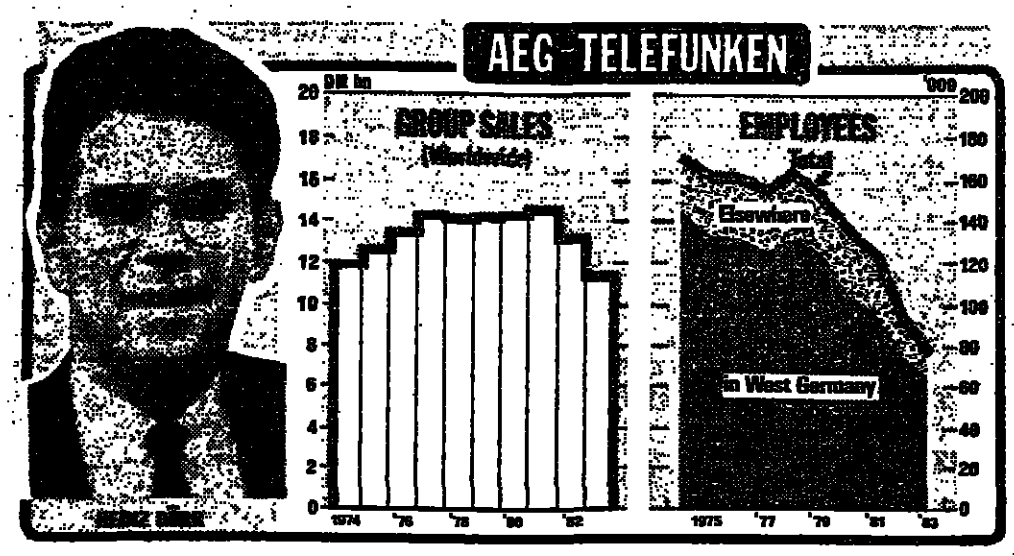
By Jonathan Carr in Frankfurt

FOR MORE than four years, Herr Heinz Dürr has battled with the problems of AEG-Telefunken, the lumbering, deeply-indebted West German electricals group. Now he faces perhaps the most acute dilemma of any AEG chief executive in the post-war period. How best can he cope with the challenge of success? Specifically, how can he stop the AEG workforce and shareholders baulked of a dividend for a decade, drawing the wrong conclusions from the company's recent, striking progress?

That Herr Dürr is aware of the problem was clear from his extraordinarily reticent comments at the press conference this week to present AEG's results for 1983. He noted almost in passing that the group worldwide had made a net profit of DM 37m—after an operating loss of DM 932m (£245m) in 1982—but stressed that this was "no reason to cheer." He would say no more than that AEG would "again be in the black" in 1984, although internal evidence suggests that, barring economic catastrophe, the company is heading for a much bigger profit this year than last.

Herr Dürr was unable to suppress a half-smile of satisfaction as he announced that AEG would definitely respect the deadline of this September 18 for repaying key creditors. This was the date set through the "Vergleich" — composition proceedings — under which the financially stricken group was released from 60 per cent of its debt burden, but was committed to paying back the other 40 per cent. However, Herr Dürr gave a stern warning that the success of the Vergleich did not mean AEG was wholly out of the wood. The company's financial liabilities at a net DM 1.8bn were still much too high (albeit DM 700m less than at the start of 1983) and profitability still too low.

The warning is certainly justified. For example, under the terms of the composition, AEG's creditor banks will be entitled to receive just over DM 1bn this September. But they have already agreed to turn this same sum into a further credit. The difference will be that this time AEG will have to pay interest on the loan (perhaps around DM 100m a year) whereas during the Vergleich it had no such obligation.



The danger is that this kind of warning will not make an impact on AEG's sorely-tried labour force. After all, for a very long time (perhaps longer than some of AEG's younger workers can remember) the company has produced poor, sometimes disastrous, results and has been the object of a lot of sour jokes. Now AEG is back in the black, the Vergleich will soon be over and the share price, which hit a low of DM 23 in August 1982—the month the company had to seek court protection from its creditors—is hovering around the DM 100 mark. It would be little wonder if AEG workers now breathed sighs of relief, concluded that things were all right at last and relaxed those extra efforts they have been making.

A lot of shareholders seem bound to be looking for an early dividend payout again too, although AEG still badly needs every D-mark of profit to be ploughed back into the enterprise. Reserves must be strengthened and investment intensified—not least in research and development. It is not as though the competition at home and abroad has been standing still while AEG has been struggling to keep its head above water.

It is, of course, in part a tribute to Herr Dürr that this problem of success exists at all. When he took on the AEG challenge in 1980, at the age of 46, a lot of people wondered whether he had the experience and stamina to see it through. His background as head of a medium-sized family business in Baden-Württemberg, specialising in building paint shops for the motor industry, did not suggest he was tailor-made to be head of the country's second biggest electricals concern. His sense of humour and informality may also have suggested he was a bit of a "softie"—at least to those unaware of his earlier success leading the employers' team in wage negotiations with the metalworkers trade union.

Herr Dürr has certainly made mistakes in these four years. For one thing he talked too openly about prospective progress at AEG, evidently underestimating the real extent of the difficulties he faced. He also flirted with the scheme to pull AEG out of the domestic appliances business altogether, not fully realising at first the disastrous psychological impact such action could have on the public.

For millions of customers at home and abroad, AEG has become a household name for domestic appliances even though these goods make up only 15 per cent of overall sales. Herr Dürr soon realised the key point was not to get rid of this sector but to put it through a slimming cure and ensure it made a profit—which it has been doing since last autumn. In contrast, AEG disposed of its loss-making video and audio subsidiary to Thomson-Brandt of France (gaining in part exchange a small stake, which it has the option to increase, in the Thomson holding company). The only division of AEG still in the red is Office Systems (Olympia), which accounts for 10 per cent of sales compared with 20 per cent for automotive engineering, 16 per cent for standard products like cables, tubes and meters, and 15 per cent for radio, radar and communications systems.

It may seem exaggerated to praise Herr Dürr for this turnaround to profit. Many people, after all, would argue that "I would be sitting pretty too if 60 per cent of my debts were written off at a stroke." It is true that the Vergleich gave AEG its only real chance to put itself to rights. It is also true that Herr Dürr had crucial help over the last 18 months or so from two people rarely in the public eye — Herr Klaus Kuhn, formerly on the board of Thyssen, who has been acting as financial adviser to AEG, and Herr Wilhelm Schaaf, the court-appointed administrator of the composition proceedings. All internal evidence suggests the three have worked as a highly effective team—and it is noteworthy that Herr Kuhn will be taking over as head of AEG's supervisory board once the composition is over.

That said, Herr Dürr's real achievement is not to be found simply by perusing AEG's balance sheet. The key point is that despite the big cuts in the workforce and the shock of the Vergleich, Herr Dürr has given AEG two (connected) qualities it has long lacked—a sense of continuity and a boost to morale.

Since the war, during which AEG lost the vast majority of its assets which were in the East, the company has got through 10 chief executives (Herr Dürr is number 11). For much of the time it was obsessed with the desire to be the equal of its main domestic competitor Siemens but, unlike Siemens, AEG did not move strongly and early enough into overseas production — away from the high labour costs and hardening D-mark at home. When it became clear in the mid-1970s that a major shakeout and a cut in capacity was needed, Dr Walter Cipa was brought in from outside the company to do the job. He did a lot of chopping but, as it proved, not enough—and his acerbic leadership style caused friction, even bitterness.

Herr Dürr, who took over from Dr Cipa, has a very different style. He has quietly made a lot of management changes, not "lopping off dead wood" but switching people to positions for which their qualities better suit them. He has also stated he is not leaving AEG until his job there is really done.

Not everyone believed that at first, thinking he might scuttle off back to his family business after the Vergleich was opened —or at least leave as soon as AEG was back in the black. Now those doubts have gone, following Herr Dürr's recent reappointment as chief executive for a further five years—that is to 1990. The AEG workforce is faced with the quite extraordinary spectacle of a boss sticking out his job for a decade!

Herr Dürr, perhaps partly by accident but also by design, is also on the way to laying the ghost of Siemens. It used to be common to talk about AEG as an "electricals giant" and then immediately point out that it was in the red while Siemens made big profits. Nowadays AEG can hardly be called a giant (with annual sales of just over DM 11bn compared with Siemens DM 40bn, but it does stand a fair chance of staying in the black—which as far as Herr Dürr is concerned is what really counts. His next five years as chief executive may be less dramatic than the first five, but they will hardly be less tough and challenging.

Economic adjustment

Jargon phrase that hides the issues

By Tony Killick

THE NEED for economic adjustment in the face of balance of payments difficulties has become a common theme for statesmen, public servants and academics alike. But — surprise, surprise — the literature is notably silent on what actually is meant by the term.

It is not astonishing, then, that it is being used in some diverse ways. To me, "adjustment" implies a change with some permanency, built into the productive structure. But International Monetary Fund and others often nowadays appear to believe that adjustment is as adjustment does — as being synonymous with improvements in the balance of trade or on the current account. This is apparently the view taken by Mr Jacques de Larosière, the managing director, in his speech to the last IMF annual meeting, noting improvements in trading and current accounts as evidence that "balance of payments adjustment is well advanced throughout the developing world."

Morgan Guaranty's influential *World Financial Markets* takes a similar position citing a "stunning turnaround in trade performance" as showing encouraging progress towards external adjustment. But read on: "The improvement in trade balances has come about largely . . . through cuts in merchandise imports . . . (and) such low import levels are not sustainable."

Imports have indeed been cut and not only in the major Latin American countries. Taking all oil importing less developed countries (ldcs) together, their total import volumes expanded at over 8 per cent per annum in 1968-74 and at 4½ per cent in 1974-79, but *declined* by nearly 1 per cent per annum in 1979-82. Three-quarters of all the "improvement" in their trading balances are due to import cuts. That is not only bad news for their trading partners — who have as a result lost $30bn worth of orders during the past two years — but for the ldcs as well. As the 1973 IMF annual report points out, in many cases these cutbacks extended to imports required for the production process, "with severe consequences for the level of current and potential future output."

To a major extent, import savings have been achieved by the intensification of trade and payments restrictions. The 1983 IMF report on exchange controls found that many ldcs had tightened import restrictions, payments regulations and the regulation of "invisible" transactions. Even so, there had also been a worsening in payments arrears, which had doubled in a short period.

But reduced current account deficits tell us nothing about adjustment in any serious sense if it is based largely on savage reductions in imports, partly by means of emergency administrative controls, with adverse effects on the productive system (and thus potentially on the ability to export and produce import substitutes), and if these low import levels are not sustainable.

True, not all the turnaround was achieved through controls.

Those who control the IMF should allow it to redesign its policies

A good deal of it was the result of reductions in demand, investment and economic growth—bad news for the world economy once again. Thus, from an average of 5 per cent per annum in 1976-80, the average real growth of ldcs fell to an estimated 1.4 per cent in 1980-83, well below the expansion of population, notwithstanding a much better performance in southern and eastern Asia.

Should reductions in the trade deficit achieved by holding down domestic demand and growth be regarded as adjustment? That all depends on whether it is accompanied by a more fundamental re-ordering of resource uses, particularly as regards savings; and on whether it will be politically sustainable. The path to economic adjustment is strewn with a multitude of well-intentioned programmes.

But if it is adjustment, then it is certainly *high-cost* adjustment. And that is important, for it is precisely because of such costs that we describe payments deficits as "a problem." The costs incurred can be viewed in terms of damage to other policy objectives: reduced real incomes; lost jobs; the aggravation of poverty. What policy-makers have to worry about is how to achieve *cost-minimising* adjustment, not least in the poverty-ridden countries of Africa, Asia and the Western hemisphere.

The name of the cost-minimising game is *structural* adjustment. This means shifts in the composition of production and demand to increase export earnings and reduce import dependence. It implies a movement of resources into the sectors producing tradeable goods (notably agriculture and industry), at the relative expense of non-tradeables (especially consumer-oriented services). This is the kind of adjustment which the World Bank has been assisting in recent years, and it is one in which the exchange rate has a specially important role to play.

This type of change has the crucial attribute of being more than temporary, because it is built into production processes. As well as being more cost-efficient at home, it is better news for the rest of us, because adjustment is achieved at a higher level of economic activity and trade. That brings me back to the IMF.

The constitution of the Fund specifies growth, employment and economic development as primary policy objectives. It looks to the Fund to promote the expansion of trade and to assist governments to correct payments imbalances "without resorting to measures destructive of national or international prosperity." To achieve these ends, those who control the Fund should allow it to redesign its policies away from largely short-term programmes and its stress upon the limitation of demand in favour of more cost-efficient approaches.

The recent Commonwealth study of the Bretton Woods institutions gave a push in this direction. So did Robert Roosa in a recent lecture. My own institute's report spells out more fully how the policy conditionality of the Fund could be moved towards a more cost-efficient solution.

The author is Director of the Overseas Development Institute, London. He is co-author of a report recently published by Heinemann Educational Books, The Quest for Economic Stabilisation: The IMF and the Third World.

Letters to the Editor

An interest rate Smithsonian

From the Managing Director, Samuel Montagu & Co.

Sir, — Nicholas Colchester's Lombard (May 3) on interest rate subsidies for less developed countries' problem loans prompts the hope that the meeting of the leading central bankers in the United States this week will result in the simple solution to the problem —namely an "interest rate Smithsonian."

It is perfectly clear that if all leading countries reduced their interest rates by, say, one-third, there would on the next day be no change in the supply of money or in relative exchange rates.

In today's economic theory the immediate reaction is to say that this would be inflationary, but why? The cost of money is the price of a vital ingredient to business and government, and a significant reduction in its price should be disinflationary, and a major relief to LDCs.

It is also interesting to recall in this context that 20 years ago contemporary wisdom would have said that an increase in the supply of money would result in a reduction of its price.

Are we simply being slaves to the current economic nostrums in not adopting the simplest possible solution to the debt crisis?

David R. W. Potter,
114, Old Broad Street, EC2.

Reforming the rates

From Mr H. Law

Sir,—A rate reform in favour of site value rating would also provide the opportunity to resolve the problem of the rate support grant. As with any spending that comes from central government funds, it has its origin in taxes which destroy incentives and distort consumption. This is why I propose that all local government spending should be financed from a site value rating system. In the initial stage, it would simply replace the present rating system, and would aim to raise roughly the same revenue. Evidence from the Whitstable land value surveys of 1963 and 1973 showed that to raise the same revenue, the rates paid by commercial and domestic ratepayers would be slightly less than at present; this would occur because site value rating would widen the rate base to include vacant and agricultural land.

In the second stage of the scheme, the rate support grant would be replaced by a national equalisation scheme. The fund for this would be raised by a national and uniform rate precept, which would be redistributed to local authorities in exactly the same way as the present rate support grant or by any other formula to be decided by the government of the day. The net result would be to transfer resources from areas where land values were high to areas where they were low.

The transition from rate support grant to equalisation scheme could take place over several years. In this way, a tax on land values, with no harmful effect on the economy, could replace around £20bn of damaging taxes. Thus, it would be possible to restore incentives without ruthless cuts in public spending.

Henry Law,
8 Woodhouse Road, Hove, Sussex.

Free trade and agriculture

From Mr D. Richards

Sir,—I appreciate Mr Davie-Thornhill's reasons (May 2) for predicting a decrease in the prairie character if free trade were to be restored to agriculture.

He does not, however, take sufficient account of the lowering of input costs that would result. Feedingstuffs, particularly, would cheapen, the rent of land would fall, and capital costs in general would become less significant—for no amount of cost-cutting can uphold the competitiveness of capital-intensive, "prairie" production methods made possible purely by public protection.

Lower input-lower output farming would certainly result, but I believe that this implies more people actually working on the land (less in the supply industries) and a more beautiful countryside.

David Richards,
73 Parkfields Road, Bridgend, Mid Glamorgan.

Words and figures can't agree

From the Chairman, Finance & General Purposes Committee, Greater London Council.

Sir,—Conservative leaders in the Midlands and the north are claiming that abolition of the metropolitan counties could save £20m, mainly through sacking staff. Tory leaders in London claim that abolition of Greater London Council would also save the capital's ratepayers millions of pounds.

Why is it then that the Government itself, the author and architect of the abolition plans, has singularly failed to come up with any figures to prove that abolition will save money? The only money figure which appears in the Government's abolition White Paper is on the front cover—the £3.60 price to buy it from Her Majesty's Stationery Office.

Although the metropolitan Tories' claim is based on a report they commissioned from well known financial consultants it is in direct conflict with an earlier report from equally eminent and independent consultants who predicted no savings but substantial increased costs.

It is high time the Government started producing its own figures to show ratepayers in both London and the metropolitan counties exactly how much it predict rate bills are going to be reduced through abolition of the democratically elected councils. Or does the Government's silence say it all? In reality there will be no savings but massive increases in costs brought about by the chaos and confusion of the proposals.

John McDonnell.
County Hall, SE1.

Vehicle tax evasion

From the Chairman, Driver and Vehicle Licensing Centre, Trade Union Side

Sir,—I refer to Hazel Duffy's article of May 3.

The Public Accounts Committee report urges the Department of Transport to ensure that no offence reports are abandoned purely through lack of staff. The DVLC trade unions have constantly urged ministers to increase staff numbers, particularly in the light of Sir Derek Rayner's scrutiny of vehicle excise duty enforcement.

We would wish to see a substantial increase in staff numbers, so that we can demonstrate once and for all the cost effectiveness of our members undertaking enforcement work at DVLC, Swansea, and in the local vehicle licensing offices throughout the country.

We are also pleased that the report draws attention to the ludicrously inadequate level of fines imposed by the courts for VED evaders. The current average fine of £36 cannot possibly act as a deterrent when set against annual duty of £90 for private vehicles. We would hope that the honest motorist would heartily endorse a swingeing increase in fines for the tax dodgers which they are subsidising.

We welcome any measures designed to catch more evaders—for example, local blitz campaigns by the police — provided we are given the staff to deal with the additional work generated.

Clive G. Williams.
Longview Road, Swansea.

The purpose of unemployment

From Mr R. Musgrave.

Sir,—I have no doubt that profit or revenue sharing by employees has beneficial effects, but the central idea of Professor Weitzman's proposals (May 2) — namely that increasing firms' marginal net revenue product by revenue sharing will raise employment — is an old one and it is flawed.

The idea certainly works if applied to one firm—General Motors to take his example, and it would work for the very short term for the economy as a whole. The problem is that while reducing unemployment, it fails to replace unemployment with any system that serves the purpose of unemployment: providing labour availability for the growth of the economy. In the absence of such availability, the price of labour and products in such bottlenecks is bid up—ie, inflation ensues.

Marginal net revenue product-increasing systems (of which Prof Weitzman's is only one example) will work if the additional employees have the same incentive to look for alternative work (bottleneck relieving work) as when unemployed. Job searching while working is, incidentally, perfectly feasible: the majority of job changers in the US do so with no intervening unemployment. The only way of giving the above incentive is to have the remuneration of the additional employees equal to or only slightly above unemployment benefit; and the majority of people concerned will only take such work if they are threatened with benefit reduction or removal.

R. S. Musgrave.
24 Garden Avenue, Framwellgate Moor, Durham.

FINANCIAL TIMES
Wednesday May 9 1984

GATHERING TO CELEBRATE 20 YEARS OF ACHIEVEMENT

Shaping Europe's future in space

BY PETER MARSH IN LONDON

LEADERS of Western Europe's space community meet today to discuss the shape of future projects. High on the list will be the U.S. invitation to Western Europe to join its programme for an $8bn manned space station by the early 1990s.

Herr Reimar Lüst, who in September becomes the head of the 11-nation European Space Agency (ESA), cut his teeth on international technical projects 40 years ago, after a U.S. ship plucked him out of the sea. His U-boat had sunk, and late, as a prisoner of war, he helped his captors to restore a German submarine which went on show in a Chicago museum. Herr Lüst will be the space agency's third director general since it was formed nine years ago to take over the work on West European space technology which started 20 years ago.

The themes of co-operation and competition with the U.S. will be much in evidence at ESA's anniversary celebrations at its science and technology research centre in Noordwijk, near Amsterdam. Speeches will be relayed by satellite video links to several European countries and to the agency's rocket launch centre in Kourou, French Guiana. Among the guests will be Queen Beatrix of the Netherlands, whose children are said to be particularly keen on space science.

President Ronald Reagan wants the Europeans to decide by the end of the year whether they will contribute up to $2bn in constructing the space base, which would stay in orbit some 300 miles above Earth and house scientific laboratories and prototypes of industrial plants.

Another talking point will be the next launch of the agency's Ariane rocket, due on May 22. The ninth Ariane will carry a satellite owned by GTE, the U.S. telecommunications company. It will be the first time that a U.S. space vehicle has been sent into orbit by anything other than an American booster. The launch will also be the first for which Arianespace, a semi-private body based near Paris, is responsible.

The company, owned by a mixture of private and public organisations in Europe including banks and aerospace companies, is setting itself up as one of first commercial satellite launchers. It is taking over the marketing of the rocket from ESA, though the space agency will continue to pay for improvements to the vehicle. Development costs have so far been £500m ($692m), 70 per cent provided by France.

The launch should help Ariane to challenge the dominance of American vehicles such as the space shuttle in putting satellites into orbit.

Competition with the U.S. in rocketry was an important element in the formation of ESA nine years ago. The space agency took over the work of two other organisations that started life in 1964 – the European Launcher Devleopment Organisation (Eldo) and the European Space Research Organisation (Esro).

Eldo was formed to provide a European civilian launcher, called Europa. The UK was a leading light in the project: Britain's Blue Streak, which the British Government cancelled as a missile in 1960, was to take a civilian role by acting as the first rocket stage in Europa. France and West Germany were to provide the other parts to the vehicle.

But, after a series of technical setbacks, the project collapsed in the early 1970s. This led France, which was determined not to have to reley on the U.S. for satellite launchers, to marshal other countries behind the mainly French-built Ariane.

ESA, which spends some $775m a year and has a staff of 1,300 based mainly in France, West Germany, Italy and the Netherlands, relies on President François Mitterrand's Government for slightly less than a quarter of its budget.

The next biggest spenders are West Germany, which puts up 20 per cent, and Britain and Italy, which contribute 12 per cent each. The other members are Spain, Sweden, Switzerland, Belgium, the Netherlands, Ireland and Denmark.

Besides its work on further developing Ariane – for example, so that the rocket can take heavier satellites into space – the agency supports research on telecommunications, scientific and Earth-observation satellites.

It has spent about $692m developing Spacelab, an aluminium canister with room for several people, which rides into orbit in the cargo bay of the American space shuttle. Spacelab made its maiden flight last November, with a further mission due later this year.

ESA has become the more successful of European partnerships in technology – but beneath its harmonious surface ructions occasionally emerge as individual members try to push the agency in different directions.

The biggest split came in the late 1970s, when France and West Germany decided to co-operate outside ESA in a joint undertaking to build direct-broadcasting TV satellites. This led Britain and Italy to soldier on within the agency on a comparable project to build a large, powerful satellite (now called Olympus) for TV broadcasts which should be launched in 1986.

France and West Germany have asserted that the agency should concentrate on advanced technology and science, leaving commercially oriented projects (in telecommunications, for instance) either to individual countries or to industry.

Britain, meanwhile, has grounds for arguing that its contributions to ESO have led to useful industrial applications. The country has spent the lion's share of its cash funding telecommunications satellites, which have helped to build up the expertise of companies such as British Aerospace and Marconi.

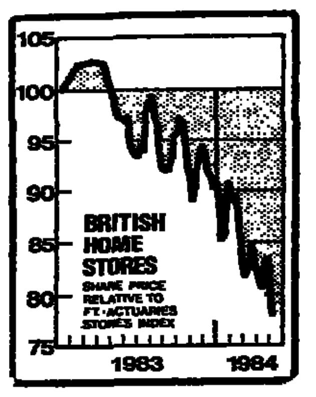
Observers expect that Herr Lüst, who is a noted astrophysicist, currently the chairman of the Munich-based Max Plank Society, a prestigous scientific organisation, will push the agency in the direction favoured by France and West Germany.

For example, he may put his weight behind a move under discussion in Europe to join forces with the U.S. in a joint mission to Mars, mooted for the 1990s.

THE LEX COLUMN

BHS designs a new Habitat

The stock market reputation of British Home Stores has been lacking in glitter for some time. Whereas a couple of years ago it was possible to rate the shares above those of Marks and Spencer, during the retailing revival of the past year, the BHS share price has been left far behind the stores sector. The growth of profits, too, has been rather subnormal, by the standards set in most other retail leaders. At £55.2m before tax, profits for the year to March increased by just under 13 per cent, and would have looked distinctly sluggish without the 30 per cent rise in net interest income to £2.7m.



Balanced against this solid but pedestrian performance, BHS is at last able to show that it is committing its resources to a remodelling of the chain, giving the stores and the merchandise a more sharply focussed appearance – in a vein which should not be at odds with the group's use of Conran Associates at a strike force for the development of new product lines.

BHS is planning to spend about £60m on the store expansion and upgrading programme this year at the price of running net cash down to about £30m. Despite the lost turnover – a couple of weeks in each store that is given the treatment – and the interest income foregone, BHS should still advance by another 10 per cent to exceed £60m this year. But the market will want to see that the programme is paying off before BHS returns to a premium rating.

Interest rates

If the London clearing banks were waiting for inspiration from the April money statistics in order to make their minds up about base rates, their weekend delay may not have been very illuminating. Since their own lending had increased by an underlying £700m in the banking month, it is easy to see why they may have been expecting an embarrassingly large expansion of Sterling M3. But the provisional increase, of only ½ per cent, is low enough to mean that the full figures have an interesting explanatory tale to tell, with the foreign currency items centre-stage.

The apparent good behaviour of those aggregates which are treated as targets showed what good judgement the authorities had, to jettison PSL2, which has grown at an annualised 16 per cent over the past quarter. While the figures looked good enough to provoke a rally in gilt-edged and in the interbank sterling market, the gloss had rubbed off within about half an hour; the rising dollar (and dollar interest rates) made sure of that.

As for base rates, the banks' desire to pull back some retail deposits could still decide the issue before long. But the half-crown wagered by one banker yesteday no longer figures even in the immaculately regulated Mo, which is currently supposed to guide interest trade policy.

Costain

Announcing 1983 results on the day the River Thames Barrier in London was opened, Costain can hardly forget that its main business is still contracting, in both senses. The Barrier contributed to 1982 profits, not 1983, though that was not alone in causing the fall from 68 per cent to 55 per cent in the contracting division's share of group profits between the two years. There were no nasty surprises and margins were held. But there was less work around, and so far there is little sign of improvement. Costain's long-term confidence is shown in recent acquisitions, all in specialist parts of the industry.

Costain's risk-spreading policy worked in 1983, with housing and mining largely responsible for the 15 per cent profit rise to £46.4m. The fuller disclosure of figures, to be commended even if the 1981 Companies Act had something to do with it, reveals a sharp turnround in housing, where the Canadian associate returned to profit, though its finances still look stretched. The UK end, too, changed from red to black, but the losses of the German equivalent will, it seems, be eliminated from now on. An £8m jump to £17.8m in associates' profits, meantime, owed much to the Kentucky coal mine, bought in 1982.

A combination of housing, mining and acquisitions should push 1984 profits to £52m, where a 25 per cent tax charge gives a 6 p/e on the shares, down 6p yesterday to 286p. The historic yield is 6¾ per cent. The rating still smacks of a contracting company, and it looks like staying that way yet awhile.

Akroyd & Smithers

While bankers rush to secure their niches in securities market-making, the underlying trend of profitability in the business is distinctly unexciting, judging by a fall in half-time profits at Akroyd and Smithers from £9.43m to £7.75m. With the share price off 25p to 525p, Warburg is still carrying a significant book loss on its 29.9 per cent holdings bought at an average effective price of 600p.

At least Akroyd's profits are ahead of the depressed £6.66m earned in the second half last time, and adjusting for the extra two weeks in the comparable first period the latest October-March result is only 11 per cent lower. But then, it should have been boosted by several months' benefit from the £41m injected by Warburg.

A boring, stable gilt-edged market clearly explains much of Akroyd's lack of profits zip, and the gold sector has lacked excitement, too. At least there has been progressive action in UK equities on a rising market, but overseas equities have been variable. So with Akroyd spending money on a shiny new dealing room and investing in new international dealing operations, the near term looks uninspiring while further out the challenge will be to cope with the upheaval in the London stock market – notably with the prospect of a sizeable number of competing market-makers in gilts. But a p/e of around 12, annualising the first half, is reasonably sober.

Fighting breaks out in Tripoli

BY PATRICK COCKBURN IN LONDON

FIGHTING broke out in Tripoli yesterday as Libyan security forces moved against dissidents in the commercial centre of the city.

Experienced observers in the capital denied reports that there had been an attempted coup against Col Muammer Gadaffi, the Libyan leader, and reports from Rome that a group using rockets and automatic weapons had attacked the barracks where Col Gadaffi lives.

Tripoli businessmen said the shooting started early yesterday morning after security forces had cleared residents from houses neighbouring an apartment block in the city centre.

The Italian news agency said that Gadaffi attackers had been driven back by armoured vehicles and fled to nearby office buildings.

A group of 20 soldiers were said to be still resisting last night, but were completely surrounded by loyalist units.

The loyal forces then attacked the block, which apparently housed a cell of dissidents, with shooting continuing until 1.30 pm. Police apparently warned people to stay indoors, but, contrary to early reports, the airport remained open.

The Libyan news agency said last night that a group of terrorists trained in Britain and Sudan had taken women and children hostages in a Tripoli apartment block but were killed when security forces stormed the building.

Libya's official account of the fighting categorically denied that Col Gadaffi's Bab al Azzaziya barracks had come under attack.

It remained unclear, however, if the Tripoli clashes were connected with the shooting of a prominent anti-Gadaffi activist trying to enter the country from Tunisia last Sunday.

The official news agency said that three men were captured and one killed as they tried to infiltrate Libya. It accused them of belonging to a terrorist group supported by Britain.

Libyan dissidents in Cairo have confirmed that the dead man was Mr Ahmed Ibrahim Ikwas, a former Libyan ambassador. He was a member of the National Front for the Salvation of Libya which diplomats described as the most serious Libyan dissident organisation.

Tension has been growing in Tripoli since last Friday when Libyans and Arab nationals were prevented from leaving the airport. There was also an increase in police activity and in the number of road blocks.

Although well placed foreign residents in Tripoli confirm the official denial of a coup attempt the fight ing yesterday is the most serious incident in the capital since Col Gadaffi came to power in 1968.

U.S. power company close to bankruptcy

By Terry Dodsworth in New York

PUBLIC SERVICE New Hampshire, the financially-troubled New England power company, is teetering on the brink of bankruptcy after failing to make a $3m principal repayment on a loan from a consortium of banks.

The company is meeting its bankers this week in an attempt to arrange new financing. In a filing with the securities and exchange commission (SEC), it said that its bankers had declared it in default and had decided to "terminate their commitments to make further loans". It is due to make further principal repayments this week.

In early April, PS New Hampshire's auditors said that unless the company found additional sources of credit within the next few months it might be forced into bankruptcy and find itself "unable to continue in existence."

Since then, however, the utility company has taken steps to reduce its cash outflow drastically. The second reactor in the Seabrook nuclear power project, which caused the crisis through runaway costs, has been cancelled, and almost all work on the site halted.

In addition, payments on Seabrook have been suspended, 11 per cent of non-Seabrook workers laid off, some salaries cut, and dividends on both common and preferred stock omitted. These measures were expected to tide the group through until at least the middle of this month.

It is not clear how the authorities would react if PS New Hampshire were forced into bankruptcy. The power industry in the U.S. is carefully regulated under state law, with controlled prices and profit margins on assets.

Prospective $1.4bn bid for City Investing

By Paul Taylor in New York

CITY INVESTING, a New York-based group with sales last year of $5.95bn and operations in manufacturing, printing, housing, consumer services and insurance, said yesterday that it has been approached by "a major financial institution" interested in acquiring the company.

City Investing's shares were suspended yesterday morning before the New York Stock Exchange opened. On Monday, the company's shares jumped $4.25 to close at $37.25 amid a wave of speculative buying. At that price the company is valued at about $1.4bn.

Last year, City Investing's earnings jumped 34 per cent to $175m from $131m, fuelled by improvements in its domestic businesses which include manufacturing air conditioners, magazine printing, housing development and food vending services. Last month, the company signed a $700m, 10-year contract to print four major Hearst Group magazines.

City Investing declined yesterday to provide any further details of the expected bid but added that it expected to make a further announcement today.

The company has, however, been the subject of repeated market rumours that it might be taken private either through a leveraged buyout or by one of the major shareholders in the company.

Last year, City Investing gave 14 of its senior executives "golden parachutes" which provided them with four times their annual base salary and other fringe benefits in the event of a takeover.

UK upgrades North Sea oil and gas reserves estimate

BY IAN HARGREAVES IN LONDON

BRITAIN HAS considerably more reserves of oil and gas than was thought a year ago, according to the latest government estimates published yesterday.

The Department of Energy's annual Brown Book suggests that estimates published a year earlier understated oil reserves by between 16 and 25 per cent and gas reserves by between 8 and 28 per cent.

Mr Alick Buchanan-Smith, the Energy Minister, said that whilst some of the new figures needed to be read with caution, it was certain that Britain's period of oil self-sufficienc would be extended "for a number of years" into the 1990s.

It would not, he said, prevent North Sea oil production from peaking in the next year or so, but would soften the rate of decline.

The Brown Book paints a picture of an emerging boom in North Sea activity.

It shows that drilling reached an annual peak in 1983 and that progress has been maintained since the year end. Twenty-one significant discoveries were made in 1983, compared with only nine in 1982.

But as UK oil production rose to a new peak, of almost 115m tonnes in 1983, the Energy Department was also piecing together the results of a major phase of the continuous British Geological Survey and other information from oil companies to redraw the country's energy map.

The main contours of that map are:

- Oil reserves are now estimated to lie in the range 1.41bn to 5.28bn tonnes, compared with a range of 1.22bn to 4.22bn tonnes in last year's Brown Book.
- Gas reserves are put at 900 to 2260bn cubic metres, compared with 700–2100bn cubic metres in the year earlier estimate.

The revised oil estimates are partly a result of better than expected performance from existing fields, but chiefly reflect a more optimistic assessment of geological and operating data, especially in the central North Sea area between the 56th and the 62nd parallel.

The higher gas estimates reflect the increased level of drilling which has occurred since British Gas increased prices offered to suppliers. The higher reserve estimates are, however, something of an embarrassment to the gas corporation which is currently trying to convince Government of its need to import 20bn pounds of Norwegian gas from the Sleipner field.

The Brown Book also shows that British industry is more or less holding its market share in the offshore supplies business, winning 72 per cent of all orders placed last year, compared with 73 per cent in 1982.

The biggest areas of foreign penetration continued to be drilling, pipelines and installation work.

Backing for Norwegian gas imports, Page 9.

EEC probes wine lake error

BY IVO DAWNAY IN BRUSSELS

THE EEC yesterday announced an investigation into the massive under estimation of last year's wine production which has left the Community with a wine take on a scale to make Bacchus blush.

According to British officials, the surplus is sufficient to fill 16,000 Olympic-sized swiming pools, while even European Commission sources concede that unsold stocks may amount to 3.2bn litres – 1.4bn litres higher than member states' original projections.

Farm Ministers meeting in Brussels made little effort to challenge Commission figures estimating the cost of over-supply at more than double the Ecu 522m ($432m) allocated in Community budgets for wine.

But what most infuriated the British, who predicted a huge surplus as early as last autumn, was a French request for additional funds to finance aid for a further 500m litres.

In more normal times, underestimation of production greatly helped producers since the EEC provides substantial guarantee fees paid at 82 per cent of the target price, or more than 20 per cent above basic rate, when projected levels are exceeded.

But with the Common Agricultural Policy (CAP) already heading for an overspend of at least Ecu 1.5bn this year, the Commission made clear yesterday that there are no more funds to be had.

That could lead to serious civil unrest, particularly in southern France.

Datastream in agreed £73m takeover bid

Continued from Page 1

Moody's, the U.S. credit rating agency – and has expanded into the broader business information area. Its UK subsidiary, established in 1857, produces regular statistics on the rate of British business failures.

D&B made pre-tax operating income of $263.7m excluding discontinued operations, on turnover of $1.5bn in 1983. It employs 25,000 people in 27 countries and its market capitalisation is $3.2bn.

World Weather

		°C	°F			°C	°F			°C	°F			°C	°F
Ajaccio	C	21	70	Dubrovnik	C	20	68	Malaga	F	23	73	Salzburg	C	5	41
Akrotiri	F	22	72	Faro	F	20	68	Malta	S	22	72	Seoul	S	22	72
Algiers	—	—	—	Florence	C	21	70	Manila	C	33	91	Singapore	F	30	86
Amsterdam	F	10	50	Frankfurt	C	9	48	Miami	C	28	82	Stockholm	C	8	46
Athens	S	21	70	Funchal	F	18	64	Milan	F	11	52	Strasbourg	C	9	48
Bahrain	C	36	97	Geneva	S	10	50	Moscow	S	24	75	Sydney	C	16	61
Bangkok	S	34	93	Gibraltar	F	20	68	Munich	F	6	43	Taipei	—	—	—
Barcelona	C	17	63	Guernsey	F	9	48	Nairobi	—	—	—	Tangier	C	17	63
Beirut	S	23	73	Helsinki	C	6	43	Naples	F	25	77	Tehran	—	—	—
Belgrade	F	20	68	H. Kong	S	27	81	New Delhi	S	37	99	Tel Aviv	F	23	73
Berlin	F	11	52	Innsbruck	C	6	43	New York	S	21	70	Tenerife	F	21	70
Biarritz	C	15	59	Inverness	F	9	48	Nice	S	18	66	Tokyo	S	23	73
Blackpool	S	11	52	Istanbul	S	15	59	Oporto	S	20	68	Toronto	—	—	—
Bordeaux	S	15	59	Jersey	C	9	48	Oslo	F	18	58	Tunis	F	23	73
Brussels	F	10	50	Jo'burg	—	—	—	Paris	C	8	46	Valencia	R	14	57
Budapest	F	14	57	Las Palmas	F	24	75	Prague	C	9	48	Venice	S	17	63
B. Aires	F	20	68	Lima	S	22	72	Reykjavik	D	7	45	Vienna	C	9	48
Cairo	S	29	84	Lisbon	C	18	66	Rio de J'o	S	33	91	Warsaw	C	10	50
Cape Town	F	20	68	Locarno	F	21	70	Rome	F	24	75	Zurich	C	9	48
Caracas	C	27	81	London	C	9	48								
Casablanca	F	16	61	Los Angeles	S	34	93								
Copenhagen	—	—	—	Luxembourg	F	7	45								
Corfu	S	21	70	Madrid	F	15	59								
Dublin	C	12	54	Majorca	—	—	—								

Readings at mid-day yesterday:

C-Cloudy D-Drizzle F-Fair Fg-Fog H-Hail R-Rain S-Sun Sl-Sleet Sn-Snow T-Thunder

Volcker attacked as prime rises

Continued from Page 1

Since the last increase in the benchmark bank lending rate on April 5, the three-month T-Bill rate has increased from 9.75 per cent to 9.93 per cent at the Monday close. The rate on three-month bank certificates of deposit was increased from 10.40 per cent to 10.75 per cent.

The move to the higher rate, which was widely attributed by New York bankers to the higher cost of funds, was led by Chase Manhattan, the third largest U.S. bank in terms of year-end assets, and was quickly followed by the other major U.S. banks.

Following the prime rate increase yesterday, other short term rates were marked sharply higher. The three-month Treasury Bill rate was quoted at 10.10 per cent at lunchtime while the Fed Funds rate increased to over the 11 per cent level despite Fed intervention to supply reserves to the market.

In the U.S. credit markets, however, the prime increase had little impact. The already depressed markets had their attention closely focused on the $6.5bn three-year note auction yesterday which kicked off the $16.5bn three-day Treasury quarterly refunding.

On Wall Street, share prices dipped immediately after the announcement but had recovered by lunchtime to post small gains. In the New York foreign exchange market the dollar held firm following its recent sharp upward novement.

Philip Stephens writes from London: The rise in U.S. prime rates brought further gains for the dollar on European currency markets, pushing sterling to an all-time low.

The rise came despite substantial intervention by the West German Bundesbank, which dealers estimated had sold between $150m and $250m in an effort to slow the U.S. currency's rise against the D-Mark.

Published by The Financial Times (Europe) Ltd., Frankfurt Branch, represented by G.T.S. Damer, Frankfurt/Main, F. Barlow, R.A.F. McClean, M.C. Gorman, D.E.P. Palmer, London, as members of the Board of Directors. Printer: Frankfurter Societäts-Druckerei GmbH, Frankfurt/Main. Responsible editor: C.E.P. Smith, Frankfurt/Main. © The Financial Times Ltd, 1984.

SECTION II – INTERNATIONAL COMPANIES
FINANCIAL TIMES
Wednesday May 9 1984

Setback for Cigna in first quarter

By William Hall in New York

CIGNA, the major U.S. insurer which warned last month of "significant" first-quarter losses, made an operating loss of $23.7m in the three months ending March 31, compared with an operating profit of $76.6m a year ago.

After crediting investment gains of $37m compared with $14.8m a year ago, Cigna's net income totalled $13.3m in the first quarter, down from $91.4m last year. Earnings per share in the latest period were 12 cents compared with $1.20.

The group's operating losses were largely the result of continued weak prices in the "intensely competitive" property and casualty industry and an increase in claim activity, including weather-related losses. In the first quarter, catastrophe-related losses jumped from $4.6m a year ago to $14.2m.

The statutory combined ratio, after policyholder dividends, was 137.2 per cent, 24.1 points higher than the 113.1 per cent recorded in the first quarter of 1983.

Mr Robert Kilpatrick, chief executive, said the company had taken aggressive action to increase prices and streamline its distribution system, but the impact was unlikely to be reflected in improved earnings during 1984.

VATICAN'S BANK SUBMITS TO ITALIAN LAW

IOR in $244m payout to Ambrosiano creditors

BY ALAN FRIEDMAN IN MILAN

THE VATICAN'S bank will pay $244m on June 30 to the creditors of the failed Banco Ambrosiano group, and will agree for the first time to submit itself to the rule of domestic Italian law.

The Vatican payment represents 60 per cent of a total $406m settlement. The payment by the Istituto per le Opere di Religione (IOR), the Vatican's bank, is described in a confidential document sent to 120 Ambrosiano creditor banks on Sunday as a "recognition of moral involvement."

This is the Vatican's way of describing its direct and indirect ownership of 10 of the overseas "dummy" companies to which Banco Ambrosiano lent $1.3bn.

Although the Vatican was involved in a series of financial dealings with the late Sig Roberto Calvi, the Ambrosiano chairman who was found dead in London in 1982, it has steadfastly refused to accept any legal responsibility. During nearly two years of negotiations, the creditor banks have gone as far as instructing London lawyers to draft a potential writ against the IOR.

Now, the Ambrosiano settlement which the IOR is set to sign shortly, states that the agreement shall "be governed by and interpreted in accordance with Italian law." The Vatican, an independent mini-state in the heart of Rome, has never agreed to submit itself to such jurisdiction.

This means that failure by the IOR to implement the agreement could make it legally liable in Italian courts. Although creditors of Ambrosiano have agreed to waive all claims against the IOR, Milan magistrates are continuing legal investigations into charges of fraud by senior officials of the Vatican's bank, including Archbishop Paul Marcinkus, president of the IOR.

Milan magistrates also recently told the Vatican's bank that it could have its assets seized if it is proved to be among those responsible for the collapse of the Calvi bank.

The Vatican was to have paid $250m in three installments over the next year, but changed its mind and opted instead to pay a lump sum in June, in exchange for a $6m discount.

Of the $244m about $152m will go to creditors of Banco Ambrosiano Holding (BAH), Sig Calvi's Luxembourg offshoot. A further $8m will go to creditors of the Nassau offshoot, some $40m will be set aside and the balance will go to creditors of Ambrosiano's Milan-based bank.

A further $140m will be realised from the sale of the Lugano-based Banca del Gottardo – this represents the $144m selling price of the majority stake to Japan's Sumitomo Bank, plus $6m of recent profits and net of $10m of provisions. There will be an additional $62m of cash assets in Luxembourg.

Creditor banks will receive $406m this summer, which is 67.66 per cent of their outstanding claims of more than $600m. The remaining $40m may be used to buy back deposits in Ambrosiano overseas banks in Peru and elsewhere.

Siemens first-half profits at DM 410m

By Jonathan Carr in Frankfurt

SIEMENS, West Germany's biggest electricals concern, boosted after-tax profit in the first half-year (ending March 31) to DM 410m ($152m) from DM 348m in the corresponding period of 1982–83.

With turnover rising by 7 per cent to DM 20.1bn, Siemens profits to sales ratio increased to just 2 per cent from 1.9 per cent before.

Incoming orders stagnated at DM 26bn, with foreign demand up by 4 per cent to DM 12.5bn and domestic orders down by 4 per cent to DM 13.5bn.

The domestic result is partly distorted, however, since the new figure is being compared with a period of 1982–83 when Siemens booked several big power station orders. If this power station element is excluded, Siemens other first half domestic orders show a rise of 13 per cent.

Demand for electronic components, especially integrated circuits, showed a sharp but unspecified rise. Orders in the data-processing sector again recorded a "double figure" rate of increase.

Netherlands top pension fund eyes Wereldhave

BY WALTER ELLIS IN AMSTERDAM

WERELDHAVE, the thriving Dutch-based property fund, has once again become the unwelcome target of a takeover bid from PGGM, the Netherlands' largest pension fund. A renewed bid has not been formally announced, but the intention is clear.

Purchases of Wereldhave shares from an unnamed Arab investor and from the pension fund of Dutch State Mines (DSM) have recently brought PGGM's holding in the property fund up from 30 per cent to 40 per cent. PGGM, which invests the pension contributions of workers in the Dutch health sector, has assets of Fl 100bn ($3.3bn) and its expenditure of Fl 75m in extending its Wereldhave holding was easily affordable.

PGGM is keen to acquire Wereldhave not only to secure the latter's highly attractive property portfolio – much of it in the U.S. – but in order to bring into its own property division the wealth of management expertise which has made Wereldhave the most successful property trust in the Netherlands.

Wereldhave, on the other hand, is anxious to retain its independence, and the board of management is understood to be indignant about the manner in which PGGM has increased its stake.

The pension fund first showed interest in Wereldhave in 1982, and made a widely-publicised bid last year, which was beaten off with difficulty. Court action was taken by both sides, and Wereldhave thought that it had come out of the storm safe from further bids.

In particular, it issued a total of 2m ordinary shares last year and sought to place these in "safe" hands. The move was intended to counteract PGGM's purchase of around 400,000 Wereldhave shares and others in West World Holding, its U.S. subsidiary.

PGGM's property division has been in the news this year because of allegations, still under investigation, of malpractice. The property division's head and the director of investments were each dismissed.

● Credit Lyonnais Bank Nederland, the wholly-owned subsidiary of Credit Lyonnais of France, recorded a gross profit last year of Fl 62m – Fl 9m less than for 1982. The net result was not declared. It was agreed last year, when Credit Lyonnais took over the bank, formerly Slavenburg's, that profits would be used to restructure the company and make up for past losses.

Management says that the fall in the gross result was due to reorganisation costs and reduced income from interest payments. However, measures taken last year to boost performance were proving successful and a recovery was expected for 1984.

Good start to year for Sandoz

BY JOHN WICKS IN BASLE

SANDOZ, the Swiss chemical and pharmaceuticals concern, has started the year well, according to Dr Marc Moret, managing director of the Basle parent company.

He said group sales have shown a "gratifying" increase so far this year, with first-quarter turnover up 16 per cent on the same period of 1983 to SwFr 1.9bn ($845m).

Although all divisions contributed to this rise in sales, turnover of the agrochemicals division jumped by about 60 per cent due to the recent acquisition of the U.S. company Zoecon. Sales of dyestuff increased by 23 per cent, the seeds division by 18 per cent, foodstuffs by 11 per cent and pharmaceuticals turnover by 9 per cent.

Last year, group turnover had increased at a rate of 8.1 per cent to SwFr 6.55bn and consolidated earnings by 17.2 per cent to a record level of SwFr 320m. The board has proposed an increased dividend for the year of SwFr 80 per share, up from SwFr 72.50 in 1982.

Dr Moret said profits were continuing to grow at the same rate last year. He said Sandoz hoped in 1984 to reach the 5 per cent return on turnover recorded in the past year.

Sales are unlikely to continue to grow at the same rate as for the first quarter, but Dr Moret said it should be possible to keep up the 9 per cent growth rate for pharmaceuticals. This division accounted in 1983 for more than 46 per cent of group turnover.

Sandoz may undertake further acquisitions this year, he said. The company is waiting for Swedish Government approval for the takeover of the confectionery producer Ahlgrens.

According to Mr Alexandre Jetzer, finance director, Sandoz has liquid assets of about SwFr 1.4bn despite the takeover in 1983 of the U.S. companies Sodyeco and Zoecon, which together cost Sandoz about $150m. He said the company has an "acquisition potential" of between SwFr 600m and SwFr 800m apart from the Ahlgrens acquisition.

The group also intends to invest between SwFr 270m and SwFr 300m in plant and equipment this year, compared with SwFr 270m in 1983. Expenditure on research and development, which amounted to SwFr 550m last year, is expected to grow in 1984 at "above the inflation rate," said Mr Jetzer.

National Semi signs pact with TI

By Louise Kehoe in San Francisco

NATIONAL Semiconductor and Texas Instruments, two of the largest U.S. semiconductor manufacturers, have agreed on long-term co-operative technical efforts on high-performance microprocessors.

Texas Instruments will gain the right to manufacture and market the National Semiconductor 32-bit microprocessor, renamed the 32000 (previously the 16032). In return, Texas Instruments will co-operate with National Semiconductor to develop an enhanced version of the chip, including a low-power version. Texas Instruments and National Semiconductor will also share development of peripheral units for the 32000 and exchange development support and software technology.

The agreement represents a major boost for National Semiconductor's microprocessor product plan. Previously, National has lacked a strong second source for its high-end microprocessors, considered essential by most potential customers. Although Texas Instruments is the largest U.S. semiconductor manufacturer, it has not developed its own 32-bit microprocessor.

The new alliance between TI and National is expected to make the 32000 more competitive with 32-bit microprocessors offered by Intel and by Motorola, which hold major shares of the high-performance microprocessor market.

Austrian bank buys 4.8% Amax stake

BY OUR NEW YORK STAFF

CREDITANSTALT-Bankverein, the leading Austrian bank, is investing around $75m to acquire a 4.8 per cent stake in Amax, the biggest U.S. mining group, in an unusual deal ensuring a long-term supply of molybdenum to a metal-trading subsidiary.

The investment is part of a deal under which British Petroleum is disposing of its 6.5 per cent stake in the U.S. group in order to conform with an order from the U.S. Federal Trade Commission. Amax, which had the right of first refusal on the 4.3m shares held by BP, has exercised its right to control their sale.

Standard Oil Company of California (Socal), which already owns 19.5 per cent of Amax and made an abortive takeover bid several years ago, has agreed to buy 2.2m of the BP shares, increasing its stake to 22.4 per cent.

Creditanstalt has agreed to buy the remaining 2.1m shares owned by BP plus an additional 1.15m newly-issued shares.

Creditanstalt is taking the stake in Amax, the world's biggest producer of Molybdenum, in conjunction with a proposed long-term molybdenum supply contract with Treibacher Chemische Werke, a metal-trading subsidiary of Creditanstalt.

U.S. securities dealer in bankruptcy filing

BY TERRY DODSWORTH IN NEW YORK

LOSSES running into several millions of dollars may be suffered by several U.S. school boards and other public agencies as a result of financial difficulties at Lion Capital, a New York trading and investment company in government securities.

Mr Rollin Needham, Lion's general partner, said the company was seeking court protection under Chapter 11 bankruptcy proceedings. The adverse market conditions which set in at the beginning of this year had "significantly eroded" the operating capital of Lion and four related concerns, he said.

In a filing with the bankruptcy court, Lion said that its liabilities now stand at $212.3m against assets of $206m, but the implied deficit of $6m could run higher because of further losses in the market since the filing on April 25.

Lawyers for Lion said a further uncertainty was the amount of extra funds which might be contributed by partners in some of the subsidiary operations under the group's formula for callable capital funds which partners are required to contribute to shore up company finances.

The affair, however, has again drawn attention to the unregulated government securities business.

Foreign banks seek Portugal operations

By Diana Smith in Lisbon

SEVEN INTERNATIONAL banks have formally applied to open branches in Portugal, following liberalisation of the country's banking laws in February.

Chase Manhattan, Manufacturers Hanover Trust, Citibank, Banque Nationale de Paris, Paribas, Société Générale de Banque (Belgium) and the Bank of Credit and Commerce International, are the first candidates for four branches in Portugal's small market.

It is understood that several Spanish banks and at least one Japanese and British bank are also interested in applying for branches in the future.

The number of formal applicants already exceeds the number of new foreign banks that most senior Portuguese officials consider acceptable at this stage. It will be some months before the Bank of Portugal makes its official recommendations on each candidate to the Prime Minister and the Finance Minister.

Political considerations may have some bearing on the final decisions. European leaders visiting Lisbon recently have all put in a word for the banks of their countries.

When Portugal joins the EEC, it will have a seven-year transition period in which to adjust banking structures to the precepts of the Treaty of Rome. During that period, the number of foreign branches in Portugal will be tightly controlled.

Scott & Fetzer rejects bid

By Our Financial Staff

SCOTT & Fetzer, the Ohio-based publishing and manufacturing company, has rejected a $420m leveraged buyout proposal from Mr Ivan Boesky, the Wall Street arbitrageur.

The board cited "significant uncertainties and conditions" related to the $60 a share offer, which replaced an earlier $50 a share proposal from senior management.

INTL. COMPANIES & FINANCE

Australian broking first for Wardley

BY MICHAEL THOMPSON-NOEL IN SYDNEY

IN THE first foreign move into Australian sharebroking, Wardley Australia, the local merchant banking arm of Hongkong and Shanghai Banking Corporation, is joining forces with Mr Rene Rivkin to establish Australia's first incorporated sharebroking firm, Rivkin Ltd.

Mr Rivkin was the founder of one of Australia's most prominent, aggressive, and profitable sharebroking houses, Rivkin and Company. Last month, it was announced that the partnership was being dissolved, with the firm's principals due to go their own ways.

Wardley will be *pumping* a little over A$10m (U.S.$9.2m) into the new firm, partly in direct equity, partly in subordinated debt, and will hold a 14.97 per cent interest. It is its first move into sharebroking anywhere.

This is in line with the announcement by Mr Paul Keating, the federal Treasurer, at Easter that foreign holdings in Australian sharebrokers were to be limited to single shareholders of 14.99 per cent, with overall foreign ownership not to exceed 40 per cent.

However, Wardley has retained the right to lift its stake in Rivkin Ltd to 50 per cent if the Labor Government relaxes its controversially tough attitude on foreign ownersbsip of sharebroking firms.

Australian sharebroking was substantially deregulated last month, in tandem with further Government moves to liberalise the financial sector, such as removing deposit controls on banks, allowing them to offer interest on cheque accounts, and allowing about 20 merchant banks to obtain foreign exchange licences.

Mr Neil MacLachlan, Wardley Australia's managing director, said yesterday that deregulation of the Australian financial system in the past 12 months has probably exceeded that of the past 20 years.

"With the merchant banks' traditional money market and domestic lending activities likely to come under pressure from the domestic trading banks, we are keen to develop fee-based activities such as corporate finance, fund management, and broking."

A subsidiary, Wardley Australia Commodities, has a seat on the Sydney Futures Exchange, and Wardley has applied to the Reserve Bank for a foreign exchange licence. Wardley Australia's net profit in 1983 was just over A$8m.

Rivkin Ltd will aim itself at the high-quality corporate, institutional and retail sectors, *and hopes to emulate the success* and innovative track record of Rivkin and Company, which in only 14 years (it was formed at the height of the Poseidon boom), built itself into a firm that in terms of turnover rivalled the much longer established Ord Minnett.

In part, its high profile derived from its skilled involvement in major takeover transactions, including those centring on Tooth and Co, Grace Brothers Holdings, David Jones, Comeng, and Metro Meat.

● IBM Australia, a wholly-owned subsidiary of International Business Machines of the U.S., scored a 29.2 per cent increase in net profit in 1983, to A$43.9m (U.S.$30.6m), on record revenues of A$520m, up 35.5 per cent.

After income tax of A$27.6m, the company was able to remit a dividend of A$21m (19.7 per cent higher than in 1982) to its U.S. parent. Gross income per employee rose from A$114,000 *in 1981 to A$131,000 last year.*

IBM has benefited locally from big orders from banks, retailers, the Department of Social Security and the private sector, while locally-made personal computers from IBM's plant at Wangaratta, in Victoria, are due to go on sale soon. In addition, personal computer exports to South-East Asia will start later this year.

China Underwriters winding up

BY DAVID DODWELL IN HONG KONG

HONG KONG'S high court yesterday granted the long awaited winding-up order for China Underwriters Life and General Insurance, the insurance subsidiary of the collapsed Carrian group.

The petition to wind up China Underwriters (CUL) was made by Mr Noel Gleeson, Hong Kong's registrar general, in October last year and was the first move towards liquidation of a Carrian group company. Delay in granting the petition was due in part to a delay in disposing of the insurers branch operations in Thailand.

Mr Gleeson said yesterday that he is likely to be appointed official receiver once a regulating order is passed in the high court—which is expected today. Mr Gleeson has been provisional liquidator for the company since October.

CUL declared shareholders' funds of HK$130.7m (US$16.8m) in its last published balance sheet—for 1981. In common with other companies in the Carrian group, no accounts have been published for 1982.

A winding-up petition against Carrian Investments, which had been quoted on the Hong Kong stock exchange, was made within days of the application to wind up China Underwriters. This was in turn swiftly followed by a petition to wind up the group's parent company, Carrian Holdings.

Carrian group directors Mr George Tan and Mr Bentley Ho face fraud charges and are scheduled to appear at a committal hearing in the Hong Kong magistrates' court in September. Debts attributable to Carrian group companies, and companies controlled privately by Mr Tan, are estimated to exceed HK$10bn. The group's largest creditor is understood to be Bank Bumiputra Malaysia.

● Malaysian government officials yesterday denied that Bumiputra Malaysia Finance *(BMF) in Hong Kong* has been ordered to wind up its operations by its parent, the government-backed Bank Bumiputra, reports AP-DJ from Kuala Lumpur.

BMF was still carrying out normal operations and was continuing to provide loans, the officials said.

BMF was reported to have loaned more than U.S.$1bn to the troubled Carrian group, Eda Enterprise, and others in Hong Kong and was facing difficulties in recovering the loans. The Auditor General is investigating the loans.

Advance by Casio Computer

By Yoko Shibata in Tokyo

CASIO COMPUTER, one of Japan's largest manufacturers of electronic calculators, lifted unconsolidated pre-tax profits by 12 per cent to Y14.12bn ($62m) for the year to March 20 1984 and net profits by 13.7 per cent to Y6.51bn. Sales reached Y176.37bn, up by 9.4 per cent. Profits per share were Y42.99, against Y42.84.

Sales of desk top calculators, accounting for 46.3 per cent of the total and digital watches, accounting for 32.7 per cent grew by 5.3 per cent and 6.2 per cent respectively having been limited by the continuing downward pressure of prices. However, sales of office computers and electronic musical instruments surged by 26.3 per cent to account for 20.3 per cent of turnover.

In order to finance an active capital investment programme, Casio raised Y15bn in the year through domestic convertible debentures and $80m through the issue of debentures in the Euromarket.

Casio forecasts sales to rise by 13.4 per cent to Y200bn in the current year pre-tax profits by 13.3 per cent to Y16bn.

The company expects favourable sales contributions from its liquid crystal TV sets and other new product lines. Capital outlays of Y14bn, compared with Y9bn, are planned for the expansion of production capacity, rationalisation, and the development of new products.

Nampak faces more competition

BY OUR JOHANNESBURG CORRESPONDENT

NAMPAK, the packaging arm of the *Barlow Rand Industrial* group, and its 51 per cent-owned subsidiary Metal Box South Africa, faced considerable competition in their first six months of association.

Nampak acquired control of Metal Box from the company's erstwhile British parent with effect from the start of last October as part of a general restructuring of the two companies' operations. As a result the performances recorded in the six months ended March 31 1984 are not comparable with *those of previous periods.*

Metal Box earned a pre-tax profit of R28.8m ($22.9m) on a turnover of R332m during the half year. It has declared an interim dividend of 10 cents from earnings of 26.5 cents a share.

Strong consumer demand for beverage cans ensured buoyant sales says Mr Bas Kardol, its chairman. However, he adds that the drought and recession adversely affected other operating divisions. The new glass container plant operated satisfactorily and is to be expanded *at a cost of about R50m by the* addition of a second furnace.

Nampak earned a consolidated pre-tax profit of R73.6m on a first-half consolidated turnover of R611.5m. Mr Kardol warns that increased competition in a number of the group's markets is likely to persist for some time, nevertheless he expects the year's dividend total to be not less than the 70 cents paid in the past financial year. An interim dividend of 32 cents has been declared from first-half earnings of 85 cents a share.

Rights issue abandoned

SINGAPORE — City Development, the property owner and developer, said that the stock exchange of Singapore has rejected its application for the listing and quotation of equity arising from a rights issue of S$90m of unsecured seven-year loan stock bearing transferable subscription rights. Consequently, the company has abandoned plans for the rights issue, originally proposed on January 26.

City Developments originally proposed the offering to raise *medium-term fixed-rate financing* to replace a portion of the group's short-term floating-rate debt.

AP-DJ

NZ to get tougher over finance house loan levels

BY DAI HAYWARD IN WELLINGTON

NEW ZEALAND finance houses which have failed to comply with government requirements aimed at lowering interest rates will face new penalties according to Sir Robert Muldoon, the Prime Minister.

Last December the Government restricted finance houses to a 1 per cent per month increase in lending but some companies have exceeded this level. Competition for funds has also kept interest rates higher than the Government wishes, said the Premier.

The form of the penalty being imposed on those who have not complied with the Government guidelines is that they will have to invest more of their funds in lower performing government stock.

At present all finance houses are required to hold 30 per cent of their funds in government stock. Under the new penalties recalcitrant companies will have to match the amount by which they exceed the Government approved lending level with additional holdings of *government stock.*

Sir Robert said that the new lending limits were only a short-term measure lasting until the end of this year.

Expansion for General Corporation

By Wong Sulong in Kuala Lumpur

GENERAL CORPORATION, the diversified Malaysian group, is embarking on two major projects—the acquisition of two rubber estates worth 54m ringgit (US$23.5m) and the development of a major commercial complex costing 154m ringgit.

The company, which is controlled by Tan Sri Low Keng Huat, a prominent developer, said the two estates—Ladang Juntai and Sekilau—have 7,240 acres of rubber and palm oil and an oil palm mill. Both estates are in Pahang state.

General Corporation will pay 39m ringgit for Ladang Juntai to be satisfied by 30m ringgit in cash and an issue of 3.6m new shares priced at 2.5 ringgit each. The price for Sekilau is 15m ringgit to be satisfied by the issue of 6m new shares.

On completion of the acquisitions, the company's paid-up capital would increase from 116.3m ringgit to 126m ringgit.

The company also announced that it has formed a joint venture with the Kedah State government to develop a 15-acre property in Alor Setar, the state's capital.

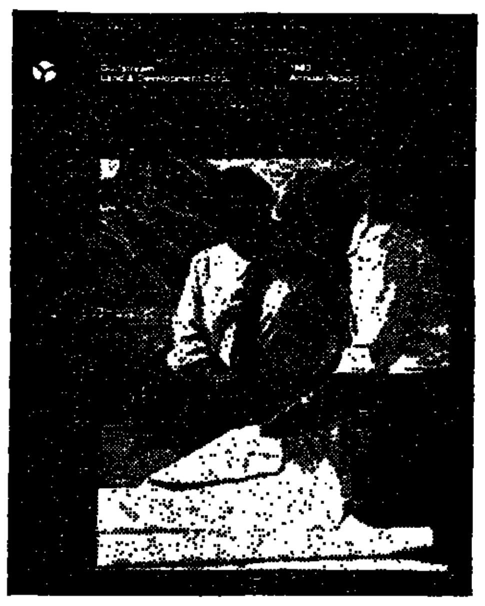
The development will have 1.2m sq ft of office and shopping space, and parking for 1,100 cars. The cost of the development is estimated at 154m ringgit over four years, and the joint venture is expected to earn 57m ringgit in profits.

North American Companies Investors Update 2

Part 1 was featured Tuesday, May 8th.

Georgia-Pacific Corporation

Georgia-Pacific is one of the world's largest forest products companies, with record sales of $6.5 billion in 1983, a 20% increase. Preparations for the future included a comprehensive asset-review and streamlining programme, substantial strengthening of the balance sheet, and a re-alignment of the management structure to better capitalize on new investment opportunities. The end result is improved efficiency and productivity. Georgia-Pacific is now firmly positioned for future growth in quality earnings.



Gulfstream Land & Development Corp.

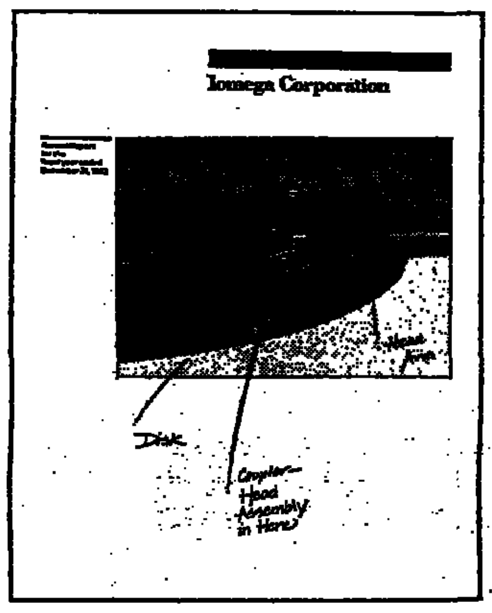
Gulfstream, a Florida developer has three principal businesses: community development, homebuilding and general construction. It is developing four large-scale communities near Fort Lauderdale, Orlando, Sarasota and Jacksonville. Principal homebuilding operations are in Orlando. Its construction companies have broad capabilities and experience throughout Florida. Consolidated assets total $175 million and net worth is $90 million. The company has a strong balance sheet.

Holiday Inns, Inc. (HIA)

Holiday Inns, Inc., is a leading hospitality company with interests in hotels, casinos and restaurants. Recently introduced new all-suite and economy hotel brands and the Spring, 1984 opening of a second Atlantic City casino will bolster the company's hotel and gaming businesses. Earnings per share in 1983 rose over 31 per cent to $3.28 and have increased an average of nearly 15 per cent per year since 1978. Shareholders' equity reached $1 billion in 1983, and cash flow from continuing operations in 1983 was more than double the 1979 level.

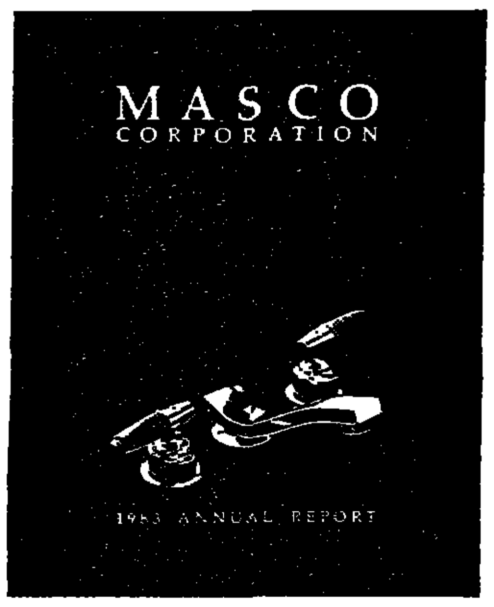
InterNorth, Inc.

A 41% increase in net income from continuing operations was attained in 1983 by InterNorth, an international energy-based corporation involved in exploration and production of oil and natural gas, natural gas transportation and distribution, liquid fuels and petrochemicals. Net income from continuing operations was $255.4 million, yielding earnings per share of $5.29, a 30% increase over 1982. Operating revenues were $5 billion, 20% higher than in 1982.



Iomega Corporation

Iomega Corporation produces a family of disk drive products based on a proprietary head/disk technology which offers the user-friendliness of floppy disk systems with the rapid access time and high capacities of rigid disks. Revenues reached $2.9 million in the last quarter of 1983 with rapid growth expected this year. An original equipment manufacturers version and a unit for retail distribution for use with such popular machines as the IBM PC TM are available.



Masco Corporation

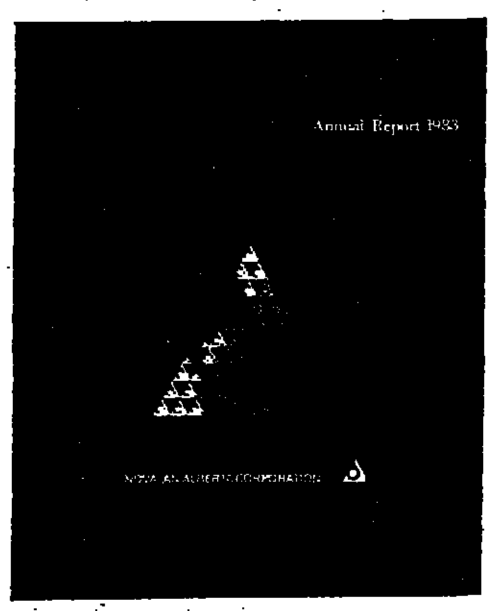
Masco Corporation, a diversified manufacturing company with leadership market positions, has REPORTED 27 CONSECUTIVE YEARS OF EARNINGS GROWTH.
Masco manufactures faucets, plumbing fittings, builders' hardware, steel measuring tapes, venting and ventilating equipment, insulation products, waterpumps, and other building and home improvement products, scanning monitors, recreational accessories, metal office products, and other products for the home and family; oil-field equipment, specialty valves and closures, and a broad range of other products for industry.
Send for our 1983 Annual Report to learn why we believe Masco's sales, from internal growth alone, will more than double over the next five years.

Mohasco Annual Report

Mohasco's record earnings from domestic operations and sharply increased net income in 1983 demonstrated the impact of an aggressively-led turnaround, which is capitalising on emerging opportunities in growing interior furnishings markets. Results in 1984 and beyond should reflect further benefits from Mohasco's revitalisation programme. A Fortune 500 company, Mohasco is a leader in the manufacture, distribution and rental of interior furnishings.

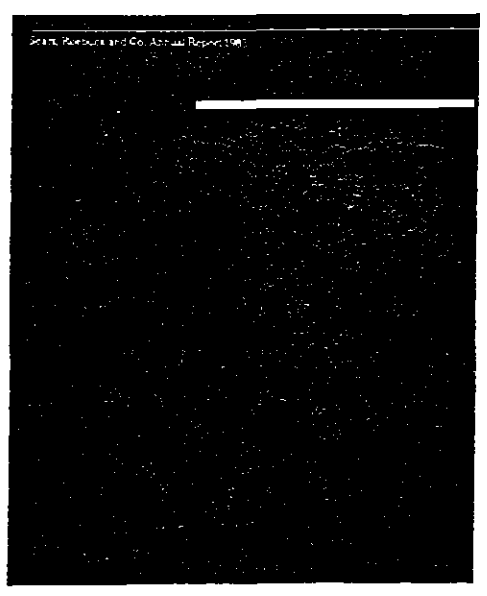
Nabisco Brands, Inc.

Nabisco Brands, Inc., with sales of $6 billion, is a major manufacturer, processor and distributor of packaged food in the United States, Canada and abroad. The company is a leading producer of cookies and crackers, margarines, consumer yeast, nut and snack products, hot and cold breakfast cereals, desserts, confectionery products and pet foods. It is also a supplier of food ingredients and imports beers into the United States.



NOVA

NOVA. AN ALBERTA CORPORATION is a major Canadian energy company headquartered in Calgary, Alberta. NOVA employs more than 8,600 people in activities related to natural gas transportation and marketing, petroleum, petrochemicals, manufacturing, and consulting and research.
At year-end 1983, NOVA assets totalled $6.8 billion and revenue amounted to $3.8 billion. Net income was $150.7 million (before extraordinary deductions). NOVA trades on the Toronto, Montreal and Alberta stock exchanges.

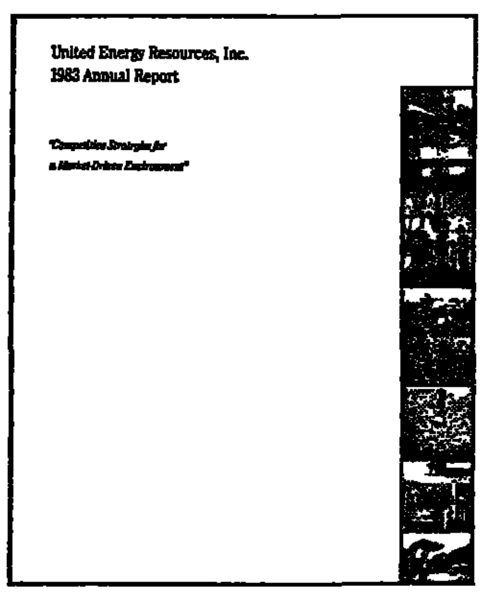


Sears, Roebuck and Co.

The corporation achieved record revenue and net income gains in 1983. Net income increased 56% to $1.34 billion or $3.80 per share. Revenues were $35.88 billion, an increase of 19.5%. Sears, Roebuck and Co. is aggressively pursuing profitable expansion through its five principal business segments: Sears Merchandise Group; Allstate Insurance Group; Dean Witter Financial Services Group; Coldwell Banker Real Estate Group, and Sear World Trade, Inc.

Teleflex

Teleflex revenues increased for the ninth consecutive year to $130.7 million. Operating earnings increased 18%... from slightly over $8 million in 1982 to $9.5 million in 1983. Earnings per share from operations were $1.83 in 1983 ... compared to $1.71 in 1982.
Teleflex Incorporated is an applications engineering company which is dedicated to solving problems by the design, development, and marketing of specialised technologies.



United Energy Resources, Inc.

The theme of the 1983 United Energy Resources, Inc. Annual Report is "Competitive Strategies for a Market-Driven Environment," and the report highlights the steps taken by UER in 1983 to improve its competitive position were the reduction of purchased gas costs and the formation of new marketing organisations.

Part of a 2½ page series appearing on May 8th, and May 9th.

Please send me the following Annual Reports:

- ☐ 13 NOVA
- ☐ 14 Omark Industries
- ☐ 15 Pay Less Drug Stores Northwest, Inc.
- ☐ 16 Teleflex
- ☐ 17 Sears, Roebuck and Co.
- ☐ 18 United Energy Resources, Inc.
- ☐ 19 Nabisco Brands, Inc.
- ☐ 20 Mohasco Annual Report
- ☐ 21 Masco Corporation
- ☐ 22 Loral Corporation
- ☐ 23 Lowe's Companies
- ☐ 24 Iomega Corporation
- ☐ 25 InterNorth, Inc.
- ☐ 26 Holiday Inns, Inc. (HIA)
- ☐ 27 Frank B Hall & Co. Inc.
- ☐ 28 Gulfstream Land & Development Corp.
- ☐ 29 Grace
- ☐ 30 Georgia-Pacific Corporation

I also want these Annual Reports featured May 8th.

- ☐ 1 Ametek
- ☐ 2 AMCA International
- ☐ 3 American Express
- ☐ 4 American International Group, Inc
- ☐ 5 First Interstate Bancorp
- ☐ 6 City Investing Company
- ☐ 7 AVCO Corporation (NYSE:AV)
- ☐ 8 AMP Incorporated
- ☐ 9 Emery Airfreight
- ☐ 10 Chesebrough-Pond's Inc.
- ☐ 11 CSX Corporation BF
- ☐ 12 EDO Corporation

Name ____________________

Position ____________________

Company ____________________

Address ____________________

Please return coupon by July 16th 1984

To: David Reed, Financial Times, Bracken House, Cannon Street, London EC4P 4BY

Or: Clyde Walton, Financial Times, 14, East 60th Street, New York. NY 10022

INTL. COMPANIES & FINANCE

North American Quarterly Results

ACME-CLEVELAND
Machine tools

Second quarter	1983-84	1982-83
	$	$
Revenue	51m	43m
Net loss	1.8m	5.4m
Net per share	—	—
Six months		
Revenue	100m	90m
Net loss	1m	9m
Net per share	—	—

ACTIVISION
Electronic games

Fourth quarter	1983-84	1982-83
	$	$
Revenue	20.4m	44.5m
Net profits	†6m	5.7m
Net per share	†0.18	0.24
Year		
Revenue	70m	157.6m
Net profits	†18m	18.2m
Net per share	†0.58	0.64

†Loss

AMERICAN CAN
Packaging, consumer products

First quarter	1984	1983
	$	$
Revenue	798.6m	758.7m
Net profits	29.5m	21.5m
Net per share	1.08	0.86

AMERICAN STANDARD
Transport, building prds.

First quarter	1984	1983
	$	$
Revenue	630.7m	492.8m
Op. net profits	22m	15.9m
Op. net per share	0.69	0.56

ARMSTRONG WORLD INDUSTRIES
Floorcoverings, furniture

First quarter	1984	1983
	$	$
Revenue	383.8m	334.8m
Net profits	23.5m	10.9m
Net per share	0.94	0.44

CIGNA
Insurance

First quarter	1984	1983
	$	$
Revenue	2.35bn	2.52bn
Net profits	23.7m	76.5m
Net per share	0.38	1.01

COASTAL
Diversified energy co.

First quarter	1984	1983
	$	$
Revenue	1.83bn	1.58bn
Net profits	50.2m	14.1m
Net per share	2.34	0.68

COLGATE-PALMOLIVE
Household, health care products

First quarter	1984	1983
	$	$
Revenue	1.24bn	1.19bn
Net profits	55.8m	38.6m
Net per share	0.68	0.53

CONSOLIDATED NATURAL GAS
Natural gas system

First quarter	1984	1983
	$	$
Revenue	1.41bn	1.22bn
Net profits	103.45m	105.2m
Net per share	2.21	2.29

CONTINENTAL AIRLINES
Airline

First quarter	1984	1983
	$	$
Revenue	277.7m	218.2m
Net loss	4.9m	57.6m
Net per share	0.28	2.85

DOME CANADA
Oil and gas, 49% held by Dome Petroleum

First quarter	1984	1983
	C$	C$
Revenue	44m	32.3m
Net profits	10.4m	9.5m
Net per share	0.12	0.11

DOMTAR
Chemicals, pulp, paper

First quarter	1984	1983
	C$	C$
Revenue	588.6m	418.0m
Net profits	23.9m	700,000
Net per share	1.30	0.03

FRANK B. HALL
Insurance broker

First quarter	1984	1983
	$	$
Revenue	95.6m	93.7m
Net profits	3.8m	7m
Net per share	0.30	0.58

GENSTAR
Property

First quarter	1984	1983
	C$	C$
Revenue	331.7m	330.2m
Net loss	3.8m	4.9m
Net per share	0.25	0.29

GEORGE WESTON
Retailing, food products

First quarter	1984	1983
	$	$
Revenue	1.81bn	1.74bn
Op. net profits	12m	12.5m
Op. net per share	0.81	0.81

HALLIBURTON
Oilfield services

First quarter	1984	1983
	$	$
Revenue	1.29bn	1.39bn
Op. net profits	75.7m	67.4m
Op. net per share	0.64	0.57

HOUSEHOLD INTERNATIONAL
Merchandising, finance

First quarter	1984	1983
	$	$
Revenue	1.88bn	1.81bn
Net profits	44.3m	36.2m
Net per share	0.76	0.61

INTERNORTH
Diversified energy company

First quarter	1984	1983
	$	$
Revenue	2bn	1.26bn
Net profits	133.8m	102m
Net per share	2.73	2.30

MCI COMMUNICATIONS
Long-distance communications

Fourth quarter	1983-84	1982-83
	$	$
Revenue	474.7m	331.4m
Net profits	5.9m	83.1m
Net per share	0.03	0.34
Year		
Revenue	1.66bn	1.07bn
Net profits	155.7m	170.8m
Net per share	0.67	0.85

NOVA
Natural gas transmission

First quarter	1984	1983
	$	$
Revenue	946.2m	1.07bn
Net profits	36m	34.2m
Net per share	0.13	0.12

PS NEW HAMPSHIRE
Electricity

First quarter	1984	1983
	$	$
Revenue	146.8m	120.6m
Net profits	15.76m	33.65m
Net per share	0.36	0.87

SEDCO
Offshore drilling contractor

Nine month	1983	1984
	$	$
Revenue	390.2m	419.1m
Net profits	94.4m	100.9m
Net per share	4.30	4.54

SUPERIOR OIL
Oil and gas Producer

First quarter	1984	1983
	$	$
Revenue	437.9m	457.6m
Net profits	70.2m	23.7m
Net per share	0.55	0.19

THOMSON NEWSPAPERS
Newspapers, publishing and printing

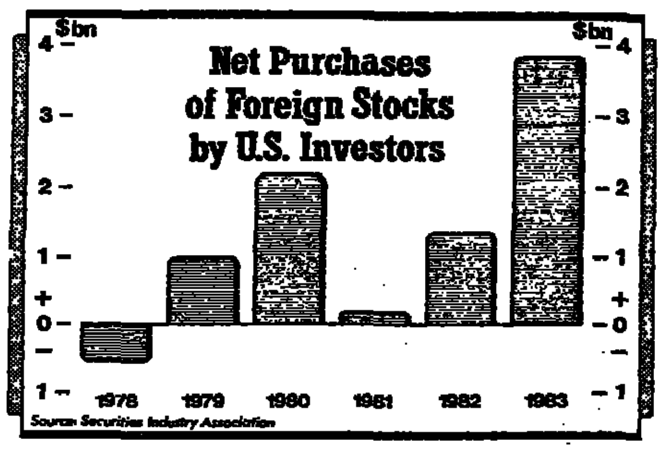
First quarter	1984	1983
	C$	C$
Revenue	183.4m	159.1m
Net profits	30.37m	24.75m
Net per share	0.61	0.50

UNOCAL
Integrated oil company

First quarter	1984	1983
	$	$
Revenue	2.7bn	2.5bn
Net profits	180.1m	128.3m
Net per share	1.04	0.74
		10.49m
0.30		
Nine months		
Revenue	1.18bn	838.6m
Net profits	63.52m	34.45m
Net per share	1.77	0.98

Prudential of the U.S. spreads its investments into foreign stocks

BY TERRY DODSWORTH IN NEW YORK



LIKE MANY other U.S. investment institutions, Prudential, the major mutual insurance company, and the biggest portfolio manager in the country, passed through the 1970s with only a marginal interest in overseas stock markets.

Its development since then displays in microcosm what has been happening on a much wider scale: U.S. fund managers may have caught on to the trend towards international investment well behind their foreign counterparts, but with their overseas equity commitments last year offsetting about 70 per cent of the flow of overseas funds into Wall Street, they are quickly making up for the delay.

Prudential's decision to *become more aggressive overseas* goes back to the late 1970s, when it set up a committee to look at the pros and cons of the move.

It already had plenty of experience of operating in foreign markets. It had, for example, bought shares in Sony, Hitachi and Matsushita in the 1960s, before Japan had become fashionable, and it later bought into European Blue Chips, such as Royal Dutch/Shell, Unilever and Electrolux. But its exposure was nevertheless limited, and, more to the point, opportunistic rather than planned.

Two broad conclusions emerged from the report. In common with other study groups, the Prudential team concluded that it could reduce its investment risk—or its overall portfolio volatility—and increase its rate of return by not limiting its investments to the U.S. alone.

"Some 50 per cent of market capitalisation is outside the U.S., and we felt that we should broaden our opportunities," says Mr Wallace Wormley, vice-president in charge of foreign portfolios. Secondly, the Prudential felt that overseas experience would teach it more about newly-emerging competition overseas. One set of competitors were the industrial companies that were posing an increasing challenge to the U.S. groups in which the Prudential's funds were invested. But it was also interested in potential rivals in the financial markets. Foreign involvement, it felt, would give it a closer look at the banks and securities houses which were becoming more aggressive in the pursuit of the investment funds on which its own operations were based.

Four years ago, the company launched two pilot projects, one for foreign equities and another for bonds. Methodically, it established a network of brokerage agents across the world, and began to build up its own back office expertise in overseas accounting, foreign exchange, *tax and regulations*.

All this was set up to manage the Prudential's own assets. But by 1982, it was ready to launch similar investment vehicles for its pension fund clients.

"We usually test market a product for ourselves, and if the project makes sense for us we design a clone for the pension funds," says Mr Wormley.

The initial target has been to commit 10 per cent of total equity funds to overseas stocks, and to achieve that figure across a broad base. By UK standards, where portfolio managers have raised their sights to around a 20 to 25 per cent commitment to foreign markets, this was a somewhat low objective. But Mr Wormley says it is a question of cautious development.

"Based on our studies, an optimal portfolio would have 20 to 30 per cent in non-U.S. securities. But we feel we have to crawl before we can run."

The group is well on the way to the 10 per cent goal. This implies a much higher total of funds for the Prudential clients' portfolio than for the company's own operations, because the pension funds aim for a larger overall weighting in equities. As an insurance company, the *Prudential is more concerned* to match its assets to its liability structure, while the pension funds are more interested in maximising their returns.

Fund managers in the U.S. may have caught on to the trend towards international investment well behind their foreign counterparts, but with their overseas equity commitments last year offsetting about 70 per cent of the flow of overseas funds into Wall Street, they are quickly making up for the delay . . .

By the end of 1983, out of a total of $72.2bn of assets, the Prudential had $30bn under management for pension fund clients. Of this, $5.2bn was invested in equities, of which $262m was in overseas stocks, against the target figure of $500m. Out of its own investments of $42bn, the insurance group had $1.7bn in common stocks, of which $128m was off-shore—compared with the goal of $170m.

The overseas fund portfolio managed for clients achieved a rate of return of 14.6 per cent in 1982, against 23.7 per cent for the group's U.S. equity investments. But last year, as the U.S. stock market began to stall, the foreign portfolio stormed ahead to a 25.6 per cent return against 20.7 per cent in the home market.

"*What we are saying to our* clients is that markets do not move in perfect synchrony," says Mr Wormley. "We want to have the flexibility to move funds and take advantage of local market conditions."

Indeed, within the overseas fund itself, investments are highly diversified by sector as well as geographically—and are very actively traded. "The variation between quarters can be dramatic," says Mr Wormley. "We have been as high as 60 per cent in Japan, and as low as 20 per cent, and we are totally out of some of the smaller markets from time to time."

He also emphatically rejects the *notion that* the Prudential has been responsible for some of the speculative stock appreciations on European markets in recent times. There are some American funds, he admits, that deal in enormous volume through U.S. brokerage houses and have the reputation of investing in hot stocks to the exclusion of all else.

But the Prudential does not work like that. It has its own dealing room and its own analysts, and trades in a very large array of shares through a mixture of foreign banks and brokerage houses. "A U.S. institution with $2bn under management may put $25m into Philips for a few quick points and think nothing of it.

"I might have $3m in Philips and 25 other Dutch stocks. We are also very careful about execution. So when they say that the Americans are coming, it is not us."

PRUDENTIAL INSURANCE

December 31 1983	Own account $m	Funds under management $m
Total funds	42,000	29,900
Common stocks held	1,700	5,200
Foreign stocks target	170	500
Foreign stocks held	128	262

UK COMPANY NEWS

Jefferson Smurfit down by 10% in 'lacklustre year'

SALES OF Jefferson Smurfit, the Dublin based international packaging, print and distribution group, advanced by 37 per cent to I£685.9m in the year ended January 31 1984 but pre-tax profits emerge nearly 10 per cent lower at £12.83m, after a sharp increase in interest charges.

In what the directors describe as a "difficult and lacklustre year" the UK showed a turnround from losses (before interest and tax) of £2.9m to profits of £26,000. In the U.S. profits moved up from £18.1m to £18.8m on sales £283m higher at £484m reflecting the full acquisition of Smurfit Diamond Packaging. At this level sales now represent 71 per cent of the group total.

Business in Ireland continued to be very difficult and profits here were marginally lower at £4.92m (£5.05m). The directors explain that cost cutting and retrenchment were the order of the day in 1983.

On the current year the directors report that there are "ambitious plans and budgets" and the results so far are up to expectations. Prices have firmed dramatically in the U.S. and better levels for many products have been seen in the UK. In Ireland there has been little improvement.

Net interest payable for the year was up from £6.45m to £10.84m, while there was a turnround from a share of profits of £974,000 to loss of £306,000 from associates.

Taking account of tax credits of £8.1m (£1.47m), and minorities profits of £3.2m (£581,000 losses) there is a net balance of £17.74m (£16.3m). Earnings per 25p share amounted to 12.8p (12.2p). The tax credit reflects an exceptional credit of £8m arising from the claw back of U.S. deferred tax.

Referring to the dividend the directors say that provisions have been made for the payment of dividends to shareholders on the basis of the same total cost to the group as for 1982-83.

● **comment**

Jefferson Smurfit has put the troubles of the last couple of years behind it by expanding rapidly in the U.S. With I£107m cash and a ratio of net debt to equity of 39 per cent it is well placed to take up further opportunities. The U.S. still looks the most attractive area for development. In Ireland the company is grateful that things have at least not worsened and in the UK modest improvements in demand are being eroded by imports. Jefferson Smurfit sold 20 per cent of its equity in the U.S. operation in October raising around I£40m. At the time it said it would not allow its stake to drop below 51 per cent which still gives room for further sales if a cash and equity deal seemed the best mix for any further U.S. acquisitions. Meanwhile, the pre-tax profits of I£12.8m are ahead of the I£12m forecast by the company in December. Anything less than I£30m for the current year would disappoint the market which has largely discounted the profits advance in the current share price which at 149p unchanged yesterday gives a prospective p/e on a 35 per cent actual tax charge of around 16.

Keeping ahead of the game in search for investments

Tim Dickson looks at the emergence of a new development capital company

FINANCIAL institutions in the City of London are by now well used to fund raising visits from venture and development capitalists. But the current efforts of TR Berkeley Development Capital to raise up to $150m by an offer for subscription of 3,000 shares at $50,000 each are undoubtedly a little unusual.

The new company (to be chaired by the Marquess of Tavistock) will be incorporated in Jersey and is a wholly owned subsidiary of Touche Remnant Holdings, the UK investment manager best known for its investment trusts and responsible overall for more than £2bn of assets. The key participant, however, is the California based Berkeley Consulting Group which is expected to be the main source of opportunities and which will choose and monitor the fund's investments on the West Coast of America.

Founded by Mr Arthur Trueger in 1977, Berkeley has specialised in introducing a number of UK institutional investors to the excitement of fast growing high technology businesses in California. Since early 1981 the group has arranged more than $170m of development capital for its 15 European clients—among them Touche Remnant, Schroders and Murray Johnstone—and claims that nine of the 33 companies involved have either achieved a quotation or been sold to a third party.

Trueger admits that his conscious pursuit of European institutions was inspired partly by an unwillingness to join the hordes of U.S. venture capitalists already chasing U.S. pension funds for a share of their assets. But he points out, "Because we have no U.S. clients we can't run away if things go wrong. We are very much committed to our international clients."

Berkeley is an avowed development capital (rather than venture capital) enthusiast and this is reflected in the aims of the new company. "The trouble with being venture capitalist is that it's a bit like being a frontiersman. It's exciting but you may end up with an arrow in your back."

Thus TR Berkeley Development Capital will only invest "when the risks have been reduced" and where the manager "believes the company to be a likely candidate for a public quotation of third-party acquisition within 12 to 24 months of investment." TRBDC will have a life of five years and unless shareholders vote otherwise will distribute its assets in mid 1989.

Trueger dismisses suggestions that later stage deals have too often been overpriced though he concedes that some U.S. investment banks have got "slaughtered" in the recent bear market. "The trick is to find companies before others do, before they get too widely publicised and too fancy a price. Five of our staff concentrate exclusively on seeking out and cultivating potential investments."

As for the bear market Trueger is unperturbed. "We have bought companies at the top of the bull market like 3Com and Integrated Device Technology and still done well. The true test of any investment manager is his ability to perform at any time of the investment cycle, not just when things are in his favour."

The link between Berkeley and Touche Remnant, meanwhile, is a further sign of change at what was once one of the UK's sleepiest investment trust groups. The relationship between TR Technology, a £242m investment trust with $33m of development capital investments in the U.S., became so close that last November TR acquired 40 per cent of its West Coast friend. Until not so long ago getting into bed with a relative upstart from California would have been considered the height of indecency for Touche's senior management.

Recovery continues at J. Crowther–pays 1p

DESPITE A loss of £56,000 at Rayon and Allied Fibres, since closed, John Crowther Group, woollen textile manufacturer, has continued its strong recovery and turned in taxable profits of £227,000 for the 1983 year, against £46,000. The company has also returned to the dividend list with a 1p payment, as forecast.

Mr Trevor Barker, chairman, says that with the better forward order position and business, and with the improvement in operations, he is confident of increased profits in 1984.

At the midway stage, losses had been reduced from £114,000 to £38,000, and directors said that the completion of the rationalisation programme would bring benefits in 1983 including the release of more property for sale and lease. They were optimistic of a profitable year.

They now point out that the completion of rationalisation has left the group with a modern, efficient factory. The plant which is now available has enabled the group to budget for an increase of 25 per cent in fabric output and the group has currently delivered, or has on order, 70 per cent of the year's budgeted production, compared with 40 per cent at this time last year.

Mr Barker says the yarn companies, Beaumontex and Patsy Yarns are profitable, progressing well and creating a strong identity in their respective markets. Directors, he adds, are working with Prelore, carpet yarn producer, towards a more independent operating system, which will benefit itself and the group.

Turnover for the year expanded from £5.61m to £7.33m and operating profits amounted to £423,000, compared with £271,000. Bank interest took £196,000 (£225,000).

After tax, £35,000 (£3,000 credit), and extraordinary debits of £141,000 (nil), the available profit came through little changed at £51,000 (£49,000). Earnings per 25p share were 3.1p (0.9p) on capital increased by last June's rights issue.

● **comment**

The only aspect of yesterday's full-year figures from John Crowther that had the market wrong footed was the losses, both above and below the line, from recycling ICI and Courtaulds waste. But for that the company would have easily made the £300,000 profit that the City was expecting. Short-term figures apart, the real point is that Mr Trevor Barker is pulling together a solid textile company out of the mess that he inherited. A rights issue last summer, injecting £850,000, has eased the debt problem and the company expects borrowings to halve again this year to between £400,000 and £500,000. Production has moved from 18,000 pieces of cloth in 1982 to 34,000 last year and in-house budgets of 50,000 for 1984 are already being left behind. Unless there is any unforeseen horror profits could reach £450,000 pre-tax and there are enough tax losses to cover the next few year's profits. Acquisitions could be aimed at reducing the cyclical nature of the business. But there is no rush, the group is probably only in the first stages of the latest cycle, perhaps not fully recognised in an historic p/e of 10 at 32p.

Midland Marts unchanged

VIRTUALLY unchanged full year pre-tax profits of £522,000, against £524,000, were achieved by Midland Marts Group, a USM quoted company which deals in livestock, agricultural property and computer software.

Turnover for the 12 months to January 27 1984 rose from £2.7m to £3.17m, but operating profits fell by £5,000 to £519,000. Associate company profits amounted to £3,000 (nil).

The dividend total is being held at 4p net per 25p share by an unchanged final payment of 2.75p. After tax of £263,000 (£231,000), earnings per share are shown as 7.6p (9.1p). There was an extraordinary provision of £100,000 for deferred tax, which has been transferred from reserves.

BASE LENDING RATES

A.B.N. Bank	8½%	■ Hill Samuel §	8½%
Allied Irish Bank	8½%	C. Hoare & Co. †	8½%
Amro Bank	8½%	Hongkong & Shanghai	8½%
Henry Ansbacher	8½%	Kingsnorth Trust Ltd.	10 %
Armco Trust Ltd.	8½%	Knowsley & Co. Ltd.	9½%
Associates Cap. Corp.	9 %	Lloyds Bank	8½%
Banco de Bilbao	8½%	Mallinhall Limited	8½%
Bank Hapoalim BM	8½%	Edward Manson & Co.	9½%
BCCI	8½%	Meghraj and Sons Ltd.	8½%
Bank of Ireland	8½%	Midland Bank	8½%
Bank of Cyprus	8½%	■ Morgan Grenfell	8½%
Bank of India	8½%	National Bk. of Kuwait	8½%
Bank of Scotland	8½%	National Girobank	8½%
Banque Belge Ltd.	8½%	National Westminster	8½%
Barclays Bank	8½%	Norwich Gen. Tst.	8½%
Beneficial Trust Ltd.	9½%	People's Tst. & Sv. Ltd.	9½%
Bremar Holdings Ltd.	8½%	R. Raphael & Sons	8½%
Brit. Bank of Mid. East	8½%	P. S. Refson & Co.	8½%
■ Brown Shipley	8½%	Roxburghe Guarantee	9½%
CL Bank Nederland	8½%	Royal Trust Co. Canada	8½%
Canada Perm't Trust	8½%	■ J Henry Schroder Wagg	8½%
Castle Court Trust Ltd.	9 %	Standard Chartered ‖	8½%
Cayzer Ltd.	8½%	Trade Dev. Bank	8½%
Cedar Holdings	9 %	TCB	8½%
■ Charterhouse Japhet	8½%	Trustee Savings Bank	8½%
Choulartons	10½%	United Bank of Kuwait	8½%
Citibank Savings ¶	9½%	United Mizrahi Bank	8½%
Clydesdale Bank	8½%	Volkskas Limited	8½%
C. E. Coates	9½%	Westpac Banking Corp	8½%
Comm. Bk. of N. East	8½%	Whiteaway Laidlaw	9 %
Consolidated Credits	8½%	Williams & Glyn's	8½%
Co-operative Bank *	8½%	Wintrust Secs. Ltd.	8½%
The Cyprus Popular Bk.	8½%	Yorkshire Bank	8½%
Dunbar & Co. Ltd.	8½%		
Duncan Lawrie	8½%		
E. T. Trust	9 %		
Exeter Trust Ltd.	9½%		
First Nat. Fin. Corp.	11 %		
First Nat. Secs. Ltd.	9½%		
Robert Fraser	9½%		
Grindlays Bank ‡	8½%		
■ Guinness Mahon	8½%		
■ Hambros Bank	8½%		
Heritable & Gen. Trust	8½%		

■ Members of the Accepting Houses Committee.
* 7-day deposits 5.25%. 1-month 6%. Fixed rate 12 months £2,500 8%, £10,000, 12 months 8.25%.
† 7-day deposits on sums of: under £10,000 5¼%, £10,000 up to £50,000 6¼%, £50,000 and over 7¼%.
‡ Call deposits £1,000 and over 5¼%.
‖ 21-day deposits over £1,000 6¼%.
§ Demand deposits 5¼%.
¶ Mortgage base rate.

UK COMPANY NEWS

Akroyd & Smithers down 18% so far

PROFIT BEFORE tax at Akroyd & Smithers, stockjobber, declined 17.7 per cent to £7.76m for the 25 week period ended March 23, against £9.43m for the comparable 27 week period.

In the last full year, the company reported taxable profit of £16.01m. Current profitability is "reasonably satisfactory," states the board.

There will be an unchanged interim dividend of 4p. Last year's total stood at 16.5p.

Tax took a smaller slice at £3.39m against £4.72m, to leave attributable profit down from £4.66m to £4.37m. There were no minority deductions this time, against a comparable £47,000.

The dividend absorbed £913,000, against £640,000, and the company retained £3.45m, down from £4.02m. Earnings per share, on a time weighted average of the number of shares in issue, were down from 29.1p to 21.8p.

The directors have agreed in principle to introduce an executive share option scheme, to be submitted for shareholders' approval at an EGM.

In the course of the period, Akroyd, one of the largest stockjobbers on the London Stock Exchange, was involved in two major deals.

In January, they announced the formation, in partnership with Rowe & Pitman, stockbrokers, of an international equity trading subsidiary.

Last November, Mercury *Securities, the parent company* of S. G. Warburg, merchant bank, acquired a 29.9 per cent stake in Akroyd.

Arenson cuts mid-way loss to £204,000

Figures for the six months to January 29 at Arenson Group, manufacturer of domestic and office furniture and equipment, showed some improvement with the loss before tax down by £90,000 to £204,000.

The chairman states that the results were in line with the group's budgets. First half figures, which contain all the work's holidays, are not representative of the full year, for which he confidently expects a return to profit.

Turnover was down from £7.77m to £6.88m, reflecting the discontinuation of certain of the group's activities. Sharply lower financing charges, £291,000 against £396,000, were taken from operating profit of £87,000, against £102,000.

The company paid no tax (£15,000), due to the availability of tax losses and allowances. The absence of extraordinary items this time (£250,000 debits) resulted in overall improvement of £355,000 in the half year result. Losses per share were down from 3.4p to 2p.

BHS aims to quicken growth rate

A NEAR 12.5 per cent increase in trading profit from sales, including VAT, 8.8 per cent higher has been achieved by British Home Stores in the year ended March 31 1984. At the pre-tax level, the profit rose 12.9 per cent, from £48.87m to £55.19m.

But the group needs faster improvements in productivity and profitability, and its strategy will be to seek to associate its brand name and image with "consistently superior products offering the best possible value for money," backed up by a major refurbishment programme covering the whole chain of stores.

Turnover was up from £502.73m to £546.85m, with merchandise rising 10.3 per cent to £434.76m, food improving 2.4 per cent to £80.82m, and restaurants moving up 5.8 per cent to £31.27m. Trading profit was £48.09m (£42.78m) and to this was added share of related companies £4.39m (£4m), interest receivable £5.34m (£4.73m), and deducted interest payable £2.62m (£2.64m).

Earnings are 16.4p (13.2p) per share and the final dividend is *4.5p for a total of 6p, compared* with 5.25p.

Sir Maurice Hodgson, chairman, says the group's market share has not been increasing fast enough at a time when important changes have been taking place in the High Street. The new objectives are essentially long term but it is hoped that first results will be evident next spring.

BHS is now committed to rebuilding a successful food business. Implementation of the marketing policy began in January and sales have shown a "dramatic improvement," with all stores showing increases over last year.

Food figures prominently in store refurbishment, but the product is the key element, says Sir Maurice. Developments in product range will be supported by the extension of food to additional stores—in the current year food halls will be included in Cheltenham, Carlisle and Canterbury, and food will be re-introduced in major refurbishments in Leeds and Hull.

Last year's refurbishment programme was dominated by further development of the design concepts built into the Harlow (Essex) store which opened in November 1982. Six *stores were the subject of major* refurbishments last year and all have food departments which were given the new "food hall" image. They were selected to cover a range of different characteristics.

In its biggest-ever development programme, the group this year will have 26 stores under major refurbishment, although not all of them will be completed during the trading year. In addition new stores will open in Ayr, Cheltenham, Carlisle and Canterbury.

Spending of about £60m is planned for this year and this level is likely to be maintained in future. In addition to the planned refurbishment of the whole chain, the management will be introducing more food halls, converting more restaurants to the new "Country Table" style, and increasing the number of stores.

After tax £21.18m (£21.71m) and extraordinary debits £2.73m, including £3.6m deferred tax provision followed the proposed changes in first year allowances, the net profit comes out at £21.28m (£27.16m), and the dividend absorbed £12.44m (£10.84m).

See Lex

HIGHLIGHTS

Lex looks at the full year figures from Costain showing profits of £46.4m and poses the question of whether the group can move far enough away from contracting to change the group's image in the City. The column then moves on to examine the figures from British Home Stores where profits growth to £55m was below the sector average, against which the group announced a long overdue revamping exercise. The column also looks at the banking figures for April which show a surprising small growth in Sterling M3. The question now is whether the rise is small enough to stop the clearing banks raising their base rates, especially in the light of three month interbank rate standing at 9½ per cent. Finally the column looks at the half time figures from Akroyd & Smithers.

Second half boost lifts Costain to £46.4m

SECOND HALF profits of Costain building contracting, housing, mining group, surged from £18.06m to £30.19m and boosted the full 1983 figure from £40.42m to £46.44m. Turnover *expanded by £14m to £723m for* the 12 months.

The directors say the year was one in which the company nearly doubled the number of homes sold in the UK, significantly improved results from mining in the U.S., restored to profit the Australian and Canadian companies, rationalised the scaffolding business, and entered into negotiations leading to some valuable acquisitions early in the current year.

The directors view the future with "considerable confidence."

A breakdown of pre-tax profits by principal activity shows: contracting £25.8m (£27.49m); housing £1.41m (£4.75m loss); mining £11.96m profit (£10.29m); property £7.28m (£7.39m).

After tax, £10.99m (£6.44m), minority interests £5.82m (£7.17m), and extraordinary credits, less tax, of £4.48m (£1.9m), the attributable balance came through ahead from £28.71m to £34.12m.

Earnings per 25p share are given as 42.6p, compared with 38.6p, and the dividend is lifted to 13.5p (12p) with a final of 8p.

Mr Terrel Wyatt, chairman, said later that the pattern of last year's results was continuing with "some fairly strong plus indications coming out of housing and mining."

He added that the group expected to see a continued and growing contribution from its housing operations and continuing growth in both mining and property.

UK housing turned round from a small loss to a small profit, the number of units completed rising from 404 to 777. U.S. housing completions at 690 were down on 1982, but have moved *up strongly in the 1984 first* quarter.

Group cash balances stood at £100m at the year end, of which £23m had been used on acquisitions in the first three months.

Mr Wyatt said that further funds were also needed for the build up in volume on the housing operations and mining.

He disclosed that an announcement would be made within two weeks regarding a further investment in U.S. coal interests, which will be funded out of the group's existing American operations.

The chairman added that the group had realised a "fair and useful figure in relation to the work involved" with the Thames *Barrier—it has a 35 per cent* share in the consortium that handled the project which was formerly opened yesterday by the Queen.

See Lex

Richards hopes to restore payout as upturn continues

THE DIRECTORS of Richards, a spinner of high technology yarns, hope to restore the current year's dividend to its former level of 1.45p per share.

They report that the recovery in Richards' performance continued in the first six months to end-March 1984 with taxable losses of £104,000 turned into *profits of £208,000.*

The profit follows a return to the black in the second half of 1982-83 which enabled the group to show a surplus of £26,000 for the full year, compared with a £327,000 deficit.

Prior to that the company had incurred losses for three consecutive six month trading periods and the dividend was cut from an annual total of 1.45p to 0.6p.

The directors now hope to restore the dividend to the 1.45p level on the back of an expected continued recovery in the second half. The reduce disparity they have declared a higher interim payment of 0.5p (0.3p).

The profit for the first half under review was achieved on turnover nearly £2m higher at £6.52m.

Knitwear yarn operation have shown a marked improvement in performance and, the directors point out, are beginning to make a satisfactory contribution to group profits.

After tax of £99,000 (credit £59,000) there was a net profit of £109,00 (loss £45,000) and earnings per share amounted to .89p (loss 0.39p).

Welpac 8% over forecast with profits at £271,000

HIGHER THAN forecast profits have been announced by USM *newcomer Welpac, which sells* pre-packed and DIY products through multiple retailers and stores.

Against a prospectus forecast of not less than £250,000, the company achieved record taxable profits of £270,970 for the year to end-January 1984.

There are no comparable figures.

The acquisition of Welpac Hardware on January 3 1984 brought about a change in the company's year end and in name from Kafue Development Company to Welpac.

In the 12 months to June 30 1983, Kafue incurred a taxable loss of £637.

Two of the group's product outlets are Texas Homecare and B & Q Retail stores.

The profit for the year under review was achieved on turnover of £3.05m. It was subject to tax of £145,387, and after extraordinary items, being acquisition and USM placing costs, there was a profit of £39,068.

However, after deducting pre-acquisition profits of the subsidiary purchased of £130,133 there was an attributable loss of £91,065.

As previously stated there is no dividend but after eliminating the losses that have accumulated in Welpac, the directors expect to recommend a payment of 0.3p for the current year.

● comment

Welpac has beaten its profits forecast by an 8 per cent margin but in an inactive market its price was unchanged at 16½p, where the company is valued at £3m. Direct comparisons with the previous period are clouded by a change in the year end and the fact that Welpac Hardware has not been included for the full year. It looks as if volumes have risen in line with the DIY industry's growth, which has allowed Welpac to add 400 lines to the 1,400 it had under its belt at its USM debut in January. Welpac is supplementing its dependence on commodity items by expanding into higher priced products, so that the top end of its market has been pushed up from £8 to £27. That is good for margins and gives Welpac a toehold in a market which should be less cyclical than the tin-tacks end of the business. Now that house refurbishments attract VAT, Welpac can expect volumes to continue growing this year as cost-conscious property owners line up outside DIY retailers.

Garnar Booth rises to record £3.2m

TAXABLE PROFITS at Garnar Booth, tanner and leather manufacturer, rose by nearly threefold in the year to January 31 from £1.12m to a record £3.18m.

Commenting on "an outstanding year of achievement," Sir Kenneth Newton, the chairman, states that the positive trends of last year are continuing and *the demand for leather remains* strong.

The company is proposing an increased final dividend of 4.85p, against 4.25p, to lift the total by nearly 13 per cent from 6.65p to 7.5p. This compares with the not less than 4.65p final forecast at the time of last September's rights issue.

The improved profit was achieved on an increased turnover, up from £59.36m to £68.71m, which produced gross profits of £10.8m, against £8.43m. Distribution costs took £1.95m (£1.72m) and administration expenses £4.53m (£4.41m), leaving operating profits at £4.32 against £2.3m.

The company received no income from investments, against £33,000, and paid £1.14m (£1.22m) net in interest.

The tax charge for the year was £766,000 (credit £7,000), and *provisions for deferred tax* and closure expenses produced an extraordinary debit of £335,000 (£327,000).

The group's factories continue to be busy, and the chairman believes that it should have another successful year.

Shareholders' funds increased by £2.9m to £14.2m by the year end and net current assets amounted to £10.2m (£4.5m).

Short-term bank borrowing has been reduced from £9m to £5.2m, and during the year medium-term loans of £2.5m were arranged with the group's *bankers. Of these, all being un*secured, £0.5m is repayable within one year, the balance within five years from August 1983.

● comment

Demand for leather goods has *improved across the board* resulting in more than doubled pretax profits for Garnar Booth. The benefit of acquiring Booth International by the then Garner Scotblair in 1981 was more than offset by the depth of the recession which then hit the business. Now, Garnar Booth is one of the few leather manufacturers to supply a full range of leather products, from clothing to fancy goods in addition to selling raw and semi-raw products. Exports have been particularly strong in the year to January 1984, accounting for around £24m of the £68.7m turnover, a 23 per cent improvement. Exchange rates, particularly the U.S. dollar have helped. Trade has been particularly strong in the U.S., then Korea and Taiwan. A pretax profit of £3.7m should be possible in the current year with a 10 per cent increase in the dividend. The shares rose 18p to 148p on the good results yesterday giving a prospective yield of 8.2 per cent.

Process plant helps Simon Engineering advance to £21.7m

THERE WERE no "dramatic changes" in demand in 1983 for the goods and services provided by Simon Engineering, and most group companies continued to find trading conditions difficult.

However, despite this and lower interest receivable and related companies profit, the group managed to achieve higher taxable profits of £21.72m, compared with £20.66m.

The bulk of the profits increase was attributable to process plant contracting, which contributed £1.2m more at £6.41m.

Elsewhere, manufacturing earned £3.82m, against £3.79m, and oil services lifted profits from £976,000 to £1.15m. There was a decline in merchanting and storage to £5.08m, compared with £5.17m, but food engineering contributed more at £382,000 (£316,000). Engineering Services added £913,000 (nil).

Total group turnover was £13.58m higher at £376.15m, and the taxable result included net interest receivable of £4.23m (£5.53m) and related companies profits of £394,000 (£1.16m).

The final dividend is being recommended at 10p (9.25p) for a higher total of 14p (13.25p).

Net profits amounted to £15.81m (£14.2m) after tax of £5.91m (£6.47m). After minorities of £981,000 (£849,000), earnings per share were marginally higher at 51.6p (51.1p).

Extraordinary debits amounted to £4.54m (£4.97m) and there was a £2.2m provision for *deferred tax.*

The figures include a *part-year contribution from Drake* and Scull, which was acquired in September.

● comment

Simon's latest results highlight once again the company's considerable survival instincts. Against the background of very difficult trading conditions underlying profits have been held at 1982 levels, with a three-month contribution from the new Drake and Skull acquisition providing a near £1m sweetener. Alongside this Simon has already managed to go almost halfway to rebuilding its otherwise strong balance sheet after the £12m cash outlay for Drake, thanks to a reduction in working capital requirements and improved cash flow. The only surprise is the decision to bite the bullet at Allen and Garcia and the UK poultry subsidiary—with its consequent heavy provisions. As far as prospects are concerned the outlook for growth is patchy and still uncertain. However, the current work load suggests that food engineering will lead the way until the process plant cycle takes off again. But the main spur to growth will come from Drake—possibly £3.7m this year—and any new acquisitions. On this basis £26.5m looks possible for 1984. At this level the 473p shares, down 20p, are selling on an undemanding prospective p/e of around 7 (30 per cent tax charge).

COMPANY NEWS IN BRIEF

Some 99.5 per cent of the rights offer by Garfunkels Restaurants has been taken up by the provisional allottees. The balance has been sold in the market at an excess over the subscription price of 205p per share net of expenses.

* * *

A £906,000 rise to £5.22m in full year taxable profits has been reported by London United Investments, and the dividend is being lifted by 1p to 12p with a higher final payment of 7p. The company is principally engaged in insurance and has some property interests.

Turnover for 1983 rose by £2.38m to £24.64m and operating profits emerged nearly £1m higher at £5.64m. The taxable result was struck after group overheads of £677,000 (£596,000) and included associate profits of £256,000 (£230,000).

Earnings per share are shown as 24.38p (23.76p). Tax took £2.64m (£2.19m) and extraordinary debits accounted for £245,000 (£447,000). There was a £33,000 transfer to capital reserves this time.

* * *

Marked improvements by both its motor and fuel distribution divisions enabled Barr and Wallace Arnold Trust to push its 1983 pre-tax profits up by £316,000 to £1.13m.

There was a sharp decline in computer services activities and a "modest" decline in the leisure and holiday operations. However, trading for the first quarter of 1984 has been "satisfactory."

Earnings for the past year improved by 4.6p to 16p per ordinary and A ordinary share, and a final dividend of 4p makes a net total of 6p, which compares with 1982's single payment of 5p.

Group turnover moved ahead from £106.17m to £116.78m.

* * *

Pre-tax profits of Bestwood, investment holding company, advanced from £219,661 to £278,703 for 1983 on turnover ahead from £893,086 to £958,996.

There is no final dividend, so the interim payment of 7.5p is the total, compared with last year's 6.5p. Earnings per share are given as 12.35p against 11.32p.

There was a trading loss of £1,320 (£9,858 profit) but the pre-tax figure was after income from investments and interest of £279,923 (£209,803). The attributable balance was £150,934 (£176,642) after tax £85,996 (£43,019) and extraordinary debits—deferred tax adjustments—of £41,773 (nil).

DIVIDENDS ANNOUNCED

	Current payment	Date of payment	Corresponding div.	Total for year	Total last year
Akroyd & Smithers ...int.	4	July 3	4	—	16.5
Ambrose Inv.	5.4	—	4.8	8.4	7.8
Barr & Wallace	4	July 6	5	6	5
Bestwood	nil	—	6.5	7.5	6.5
British Home Stores	4.25	July 9	3.5	6	5.25
Commercial Bank	30	—	30	30	30
Fred. Cooper ...int.	0.53	June 22	0.5	—	1.65
Costain	8	July 2	7	13.5	12
James Crean	4.13	—	—	8.25‖	10.5
J. Crowther†	1	Aug 3	nil	1	nil
Garnar Booth	4.85†	July 2	4.25	7.5	6.85
Gieves Group	2.65	July 10	1.5	3.75	2.25
London United	7	—	6	12	11
Midland Marts‡	2.75†	July 6	2.75	4	4
More O'Ferrall	2.4	July 3	2.08	3.3	2.98
Richards ...int.	0.5¶	June 7	0.3	—	0.75
Simon Eng.	10	July 2	9.25	14	13.25

Dividends shown pence per share net except where otherwise stated.
* Equivalent after allowing for scrip issue. † On capital increased by rights and/or acquisition issues. ‡ USM stock. § Unquoted stock. ¶ To reduce disparity. ‖ For 18 months.

Hanson wins bid battle for U.S. Industries

Hanson Trust, an industrial group, yesterday announced that it had gained control of U.S. Industries, a Connecticut-based manufacturing group, after a fiercely contested takeover battle.

Hanson revealed that the majority of U.S. Industries' shareholders had decided to tender the shares for $28 each in a deal which values U.S. Industries at $531m (£383.8m).

Sir Gordon White, chairman of Hanson Trust's U.S. operations, said that over 87.9 per cent (undiluted) and 77.8 per cent (fully diluted) of U.S. Industries' issued and outstanding common shares had been tendered to HMAC Industries Inc, Hanson's tendering company by midnight on May 7.

He added that HMAC Industries had extended its tender offer to 5 pm. New York time on Friday May 11 to allow shareholders of U.S. Industries additional time to tender their shares.

Sir Gordon said that with the addition of U.S. Industries sales by Hanson's American subsidiaries would have totalled in excess of $2.3bn in 1983.

He added that he welcomed the U.S. Industries' companies to the Hanson group and looked forward to working with U.S. Industries management to maximise profit in the future.

U.S. Industries has a wide range of activities involved in consumer products, buiding products and industrial products. "These activities nicely complement Hanson's existing interests," Sir Gordon said.

Hanson's victory follows a five week battle for control of U.S. Industries. Last Friday, U.S. Industries told its shareholders to tender their shares. Its directors said that they intended to tender their own shares—representing 5 per cent of the shares. A proposed leveraged buyout by management and other shareholders at $24 a share had failed because of lack of financial support.

Greenfield family sells 26% stake to consortium

BY ALEXANDER NICOLL

Greenfields Leisure, leisurewear and camping equipment group, said yesterday that a consortium of investors had acquired the Greenfield family's 25.75 per cent stake in the company and that a merger was planned with Blacks Camping and Leisure, whose chairman is the consortium's leader.

Among other members of the consortium is Caparo Properties, the property arm of Mr Swraj Paul's Caparo Group. Caparo, which previously held 150,000 Greenfield shares, has bought 1m more, bringing its total holding to 10.8 per cent.

Caparo already owns 20 per cent of Blacks Camping, which was sold last November by the Black and Edgington subsidiary of Mr Michael Ashcroft's Hawley Group. The buyer, who paid £3m, was a private company headed by Mr Murdoch Morrison. Mr Morrison became chairman of Blacks Camping and will now become chairman of Greenfields.

Mr David Greenfield, the current Greenfields chairman, gave no reason for the family's decision to sell their holdings in the company. He and his family sold 1.19m shares, deputy chairman Mr John Greenfield and his family sold 751,342, and Miss Marilyn Greenfield, who is not a director, sold 810,352.

Their combined holding of 2.75m shares, or 25.75 per cent, was sold at 49½p each, bringing them £1.38m. The sale valued the whole company at £5.34m. Yesterday, Greenfields shares rose 11½p to 48½.

Greenfields reported a pre-tax loss of £153,000 in the year ended October 31 1983, compared with a £536,000 profit in the previous year, with turnover falling to £19.23m against £21.47m. The company blamed the recession, an abnormally wet spring and the late arrival of good summer weather. Since then, it has attempted to build a broader product range with the purchase of East Midlands Wholesale Chemist Supplies and Rock Bottom Discount Stores.

Greenfields and Blacks Camping gave no details of the terms or timing of their planned merger proposals, but said the intention was to create a "strong force" within the leisure industry.

Blacks Camping operates 25 retail shops around the UK.

Reed agrees £20m for offshoot

London & Continental Advertising Holdings yesterday revealed details of its agreed bid worth up to £20m for London & Provincial Poster Group, a company several times its size.

LCA is planning to finance the purchase of LPP from Reed International via an offer for sale of 13.35m new 20p shares at 120p each, which will raise around £14.65m net of expenses. The balance will be financed from additional medium-term bank loans.

When LCA asked for its shares to be suspended from the USM in March pending completion of the deal, the company was valued at £6.6m. It is now applying for a full listing and dealings are expected to open on June 13.

The purchase of LPP, which has 30,000 poster sites in the UK, will give the combined group a more than 20 per cent share of a poster market worth around £100m. "London & Provincial is the jewel in the crown of outdoor advertising," said Mr John Golfar, LCA's chairman.

LCA is paying £18m in cash for LPP, with a likely additional payment of £2m to cover any increase in LPP's fixed assets between April 3 and completion. It is also proposing to change the par value of its existing 15.7m shares from 8p to 20p. The effect will be to reduce the number of shares presently in issue to 6.3m.

The two groups would have produced combined pre-tax profits of £1.6m last year on a turnover of £22m, nearly seven times LCA's own sales. LCA's net assets will rise from £2.1m to £16.8m—or from 33.3p a share to 85.7p—following the merger.

LCA's profits have risen steadily over the past five years to £580,000 before tax in the year to last December. LPP's pre-tax profits have declined from £3.9m in 1982 to £995,000 in the year to April. It was badly hit by the abolition in April 1982 of British Posters, a national sales consortium on which it depended for marketing. LCA, on the other hand has always had its own sales net work.

LCA's directors are forecasting a doubled 1.5p net total dividend for the current year, giving a 1.8 per cent yield at the offer price. Of the 13.35m nw shares to be issued, 8m shares, or 60 per cent of the total, will be reserved for preferential applications by xisting shareholders. A further 1.335m new shares will be reserved for both companies' employees.

Kleinwort Benson has underwritten the offer for sale, and the brokers are de Zoete & Bevan. The prospectus will be published on Jun 1 and applications will open on June 6.

The proposed take-over is not to be referred to the Monopolies and Mergers Commission.

Dowty Group boosts electronics growth with £13.5m buy

BY ALEXANDER NICOLL

Dowty Group, the Cheltenham-based aerospace, defence and mining equipment group, said yesterday it had agreed to buy the ordinary share capital of Gresham Lion, an unquoted electronics company, for £13.5m. Sellers would have the option of subscribing to new Dowty shares.

The purchase would fuel Dowty's already rapid growth in the electronics field. Gresham specialises in submarine torpedo fire control systems, computer graphics, display terminals and advanced power supplies.

Gresham shareholders, predominantly its directors, will be able to receive new Dowty shares at a price equal to the average of middle market quotations on the three business days ended yesterday. Dowty said Thursday's reference price was 136p, and Friday's was 137p. Yesterday, Dowty shares fell 6p to 131p.

At that price, the average would be 135p. Dowty has agreed to pay the equivalent of £15 for each of Gresham's 900,000 shares, so if all Gresham shareholders took up the share option Dowty would issue 10m new shares compared with the 202.2m currently outstanding.

Gresham also has 600,000 11.25 per cent preference shares outstanding. Dowty said no immediate offer was being made for them, but that its agreement with Gresham was expected to lead to the acquisition of the whole of its issued capital. Holders of 93.79 per cent of the ordinary shares have undertaken to accept Dowty's offer.

Gresham had net assets of £5.75m at the end of its financial year to October 1, 1983. In that year, it had pre-tax profits of £1.7m on turnover of over £18m.

EuroFerries share plan

European Ferries, a cross-channel ferry operator, will today announce details of a capital reorganisation which may restrict the fast-growing shareholders perk of cut-price fares.

EF has 167,000 shareholders, most of whom own the minimum 300 shares needed to qualify for the concession. A widespread share ownership is a useful defence mechanism for a company against hostile takeovers but it imposes high administrative costs.

The company declined to comment yesterday, however, on its plans. It is due to announce preliminary results for the year ended December 31 1983 today.

In the first six months of 1983 pre-tax profits rose by £3.9m to £8.9m on virtually unchanged turnover of £119.8m.

BIDS AND DEALS IN BRIEF

Following an EGM the board of Atkins Brothers (Hosiery) announces that the acquisition of Textlite (UK) has been completed by its subsidiary, Atkins Industrial Holdings.

* * *

The following mergers are not to be referred to the Monopolies and Mergers Commission: The animal health businesses of Imperial Chemical Industries and the Wellcome Foundation; proposed acquisition by London and Continental Advertising Holdings of London and Provincial Poster Group.

Hugin advances to over £2m

Hugin, the former cash register subsidiary of Electrolux which was bought out by its management last December, made a pre-tax profit of £2.07m for 1983, its first report and accounts disclose.

This is bang in line with the forecast of not less than £2m and was achieved on a turnover of £29.76m.

The buyout was funded by a placing of Hugin shares with over 30 British institutions and with the backing of Hugin employees and management who retained a 16.5 per cent stake in the company.

The results show a 54 per cent profit improvement over the £1.34m generated in 1982 and the directors are looking for a significant increase in profit in 1984, as stated in the prospectus.

At December 31 1983, orders in hand for delivery in 1984 were 83 per cent higher than at the same time in 1982. The company intends to seek a listing at an appropriate time in the current year.

Hugin's main business is the design and marketing of electronic retail point-of-sale equipment and systems. It distributes these worldwide through a network of 10 wholly-owned marketing subsidiaries and distributors in a further 50 countries.

The group performed satisfactorily in all its international markets. The subsidiary in the UK, has continued its record of profitability and has further expanded its market share with some notable large installations during the course of 1983.

Phoenix chief welcomes insurance share price rise

Mr Jocelyn Hambro, chairman of Phoenix Assurance, in his statement accompanying the 1983 report and accounts, welcomed the recent rise in share prices of insurance companies in 1984. He pointed out that last year's contested takeover battle for a composite insurance company had focused public attention on the substantial undervaluation of insurance company shares, a feature that had concerned the directors over Phoenix shares for some time.

As already reported, the company recorded a pre-tax profit for 1983 of £23.7m against £17.5m and dividend payments of 19.8p (17.5p).

A detailed analysis of the underwriting results for last year showed that the company was hit by the keen competition for UK motor business. Underwriting losses more than doubled from £3.6m to £7.8m on premium income that rose 9 per cent from £88.7m to £96.8m.

These losses were softened by better experience in the property and consequential loss accounts, in the UK. But the better weather last year only cut underwriting losses on UK property from £14.9m to £10.3m. Liability business in the UK also worsened.

Business in the U.S. declined considerably reflecting the effects of over-capacity and under-pricing. The operating ratio worsened from 112.8 per cent to 117.8 per cent in 1983. The remedial measures adopted by Continental Insurance, in whose pool Phoenix operates, aimed at pruning the agency force and achieving a better quality portfolio, has led to an expected drop in premium income.

The company's new life business in 1983 did not benefit from the growth generated by the change in granting mortgage relief. Growth figures were modest set alongside those other life companies. Total long-term insurance funds amounted to £1.11bn at the end of the year against £943m at the beginning.

BOARD MEETINGS

The following companies have notified dates of board meetings to the Stock Exchange. Such meetings are usually held for the purpose of considering dividends. Official indications are not available as to whether the dividends are interims or finals and the sub-divisions shown below are based mainly on last year's timetable.

TODAY

Interims: Associated Paper Industries, Centa (GB), Godwin Warren Control Systems, Marina Adventure Sailing Trust, Trafalgar House.

Finals: European Ferries, External Investment Trust, Foster Brothers Clothing, Lee Cooper, Oceana Development Investment Trust.

FUTURE DATES

Interims:

Crystalate	May 14
Gomme	May 24
Hamilton Oil Corporation	May 18
Metamec Jentique	May 18
Stainless Metalcraft	May 18
Tate and Lyle	May 30

Finals:

Atkins Brothers (Hosiery)	June 5
Billam (J.)	May 11

CRA hopes for moderate increase in 1984 earnings

BY KENNETH MARSTON, MINING EDITOR

NEVER one to be carried away by false optimism, Sir Roderick Carnegie, chairman of the Rio Tinto-Zinc group's Australian arm, CRA, said at yesterday's Melbourne meeting: "We will do well in 1984 if group earnings moderately exceed 1983 levels."

The sharemarket which was— and probably still is—expecting a further useful improvement on last year's earnings of A$71.46m (£47m), following a loss of A$13.63m in 1982, lowered CRA shares by 10p to 392p yesterday, albeit in a generaly unsettled mood.

Sir Roderick admitted that, so far, group earnings are ahead of those of last year, but he pointed out that metal prices (still at "*totally unsatisfactory levels*") and exchange rates are fluctuating markedly to make forecasting difficult. "Recovery from the deep slump is slow, hesitant and uneven."

He said that negotiations with CRA's Japanese customers over prices and tonnages for iron ore and coal had resulted in a "disappointing outcome." He was also concerned about the strike at the Broken Hill lead-zinc mines and the close-down of the Port Pirie smelter.

"Broken Hill is at a water-*shed. We would like to extend* the life of this cradle of Australian underground mining but to do so requires change," he added, pointing out that with the mining of lower ore grades working practices must be changed in order to raise productivity.

Sir Roderick thus emphasised the need for Australian mining generally to hold costs in check against the background of world *competition adding, for good* measure, that while metal prices have been steady, or falling, in real terms the world has become more sparing in its use of mtal. "each kilogramme of metal goes a long way further than it did a decade ago."

He also had a few words for governments which looked upon the industry as one still able to bear further tax and excessive infrastructure costs. "CRA has searched for ways of demonstrating that long term considerations, not knee-jerk reactions, are the correct *way of looking at the* minerals industry."

But not all was gloom. Sir Roderick commented on the growth potential of the group's interest in the Kloeckner advanced steel-making technology which "draws increasing attention" and the "further encouraging progress" of the Camalco aluminium arm.

He welcomed "desirable winds of change" blowing through the *Australian economy and noted* that Australia had competitive advantages in delivering to the fast-growing Asian markets on its doorstep. But he added that progress was "a major challenge facing your company's management."

Noranda's good first quarter

THANKS TO the strong market for zinc in the first quarter of this year Canada's Noranda mining major reports a sharp turnround to a net profit for the period of C$28.8m (£15.8m) or 17 cents per share. This follows a loss of C$29.2m in the final quarter of last year which left the company with a 1983 net loss of C$34.6m.

In fact Mr Alfred Powis, the chairman, said that the current year's first-quarter result would have been much better were it not for the two-month labour dispute in the company's British Columbia forest products industry which cost C$21m. The division ended up with a net loss of C$10m in the quarter.

Cautiously, Mr Powis added that while he expected Noranda to return to profitability in 1984, "we don't expect a really satisfactory level of earnings for the year as a whole." Such earnings were not expected to be reached until 1985-86.

MIM suffers a further operating loss

AUSTRALIA'S base metal and coal-producing MIM Holdings is still finding the going hard. It reports a net loss of A$9.6m (£6.2m) for the 16 weeks ended April 1.

This follows a net loss of A$3.8m for the previous 12 weeks which was struck before allowing an extraordinary credit of A$8.57m for what was described as "a reservation of output."

Looking on the bright side, MIM says that including this extraordinary credit and also a tax write-off for oil exploration it has made an unaudited net profit for the first 40 weeks of the current year to end-June of A$10.2m compared with a net profit of A$14.6m a year ago.

Sadly, MIM adds that the improved metal prices which appeared in the earlier months of this year have been now largely dissipated. Furthermore, the strength of the Australian dollar against sterling means that prices on the London Metal Exchange are even weaker as far as MIM is concerned.

In a generally weaker mining sharemarket in London, unsettled by the latest rise in the U.S. prime rate, shares of MIM fell 13p to 217p yesterday.

Smith & Nephew 28% profit advance at first quarter stage

THE SIGNIFICANT improvement in profits expected by Smith and Nephew Associated Companies for the first quarter ended March 24 1984 turns out to be 28.2 per cent. The figure was £10.92m, against £8.52m.

Activities of the group are the manufacture of surgical, medical and sanitary products, textiles and clothing, toiletries and plastics. Sales to third parties for the period—12 w[illegible]—rose 10.4 per cent to £84.[illegible] while the operating profit advanced 21.2 per cent to £10.31m. Net cost of borrowings was reduced to £759,000 (£1.09m) and related companies turned in £1.37m (£1.1m).

Tax takes £3.77m (£2.95m) and minorities add £2,000 (£5,000 debit), to leave the net attributable profit at £7.15m (£5.56m). Earnings are up from an adjusted 2.13p to 2.72p.

In its last full year ended December 31 1983, the group pushed up its pre-tax profit by over £10m to £44.6m, and paid a dividend of 4.5p, compared with an adjusted 3.67p. Results for the 24 weeks ended June 16 1984 will be announced in mid-August. Last year the pre-tax profit for that period came to £19m.

● comment

Smith and Nephew continues to live up to the highest expectations of the market, putting firmly behind itself the image of the worthy but dull performer of the late 1970s. The medical and healthcare division which has been largely responsible for this transformation has this quarter benefited particularly from increased exports from the UK, boosted by the cheap pound. The recently-introduced Opsite, a form of plastic skin used in surgery, is doing well in this country and is now being made in the U.S. under licence. There are improvements in the textiles and the plastics and tapes divisions, but the hygiene division is suffering from heavy competition. For the year the group could make £55m pre-tax, putting the shares, down 5p at 228p, assuming a 34 per cent tax rate, on a demanding but justified prospective multiple of over 14. Certainly, there is little for shareholders to complain about at the AGM tomorrow.

SPRAIT success with big demand for warrants

Save & Prosper's launch of its Return of Assets Investment Trust *has been oversubscribed.* Of the three classes of shares on offer, the 15m preferred — which get a high and rising income with a small element of capital growth — have all been placed. Of the 15m ordinary — entitled to the bulk of any capital gain plus some income — 11.25m were pre-placed and applications for 4.57m shares were received for the balance of 3.75m.

But the surprise was the demand for the warrants, which, in a novel move, S & P priced at 50p each, rather than "giving" them away as part of the package. Of the 3m available, 2.25m were pre-placed and applications for 9.25m were sent in *for the remaining 750,000.* All three types are expected to open at a premium when dealings start on Friday.

For the ordinary shares the basis of allocation is: applications for 100,000 shares or less will receive the full number applied for, those who applied for over 100,000 will get 100,000 shares plus 85.26 per cent of the excess asked for.

For the warrants the basis is: applications for 500 will receive 300; for 600—1,000 will get 500; for 1,500—2,000 will get 750, over 2,000 will get 2,000 plus 1.54 per cent of the excess over 2,000.

More O'Ferrall expects further growth this year

PROFITS ROSE by 9 per cent from £2.02m to £2.22m at More O'Ferrall in 1983, and the directors are expecting a further improvement in the current year.

They say that so far in 1984, turnover of this outdoor advertising and ancillary services concern has continued to grow overall, and there are indications that in its major areas of activity the rate of inflation of costs is beginning to diminish.

This leads the directors to believe that the UK market for the company's medium is showing signs of hardening and that turnover growth will continue, and an improvement in profit levels will be achieved.

The taxable profits now reported were attained on turnover 14 per cent higher at £17.36m (£15.2m), and included related company profits of £900,000 (£863,000).

Following an increase in the interim dividend, the final payout is being lifted from 2.08p to 2.4p for a higher total of 3.3p (2.96p) net per 10p ordinary.

Earnings per share are shown as 7p, some 27 per cent higher than the previous year's 5.5p.

Net profits amounted to £1.46m (£1.15m), after tax of £760,000 (£870,000), from which extraordinary debits took £164,000 (£9,000). After dividend payments the retained profit comes *out at £587,000 (£511,000).*

Most of the extraordinary debit was accounted for by a related company deferred tax provision of £292,000 this time. Property disposal profits were £5,000 (loss £2,000) and there was a deferred tax provision release of £123,000—last time there was a £7,000 loss attributable to capital increase expenses written off.

On a CCA basis, pre-tax profits *were reduced to £1.87m* (£1.71m).

● comment

More O'Ferrall's modest achievement has been to end three years of declining profits, thanks to the general surge in advertising spending last year. But business conditions remained tough—with operating margins (down slightly to 8 per cent) squeezed by rising site rentals, the biggest contributor to costs. There are signs that the market is improving in the current year —the increase in rents has levelled off and rates to advertisers have hardened slightly as the industry settles down following the demise in 1982 of the British Posters Consortium. More O'Ferrall should also benefit increasingly from its 50 per cent stake in Adshell, which recovered sharply from a poor first half, and from its long-term deal with the British Airports Authority. Profits in France and Belgium are growing after a cost-saving switch from painted signs into printed posters. The group should move steadily and unspectacularly to £2.5m pre-tax this year, putting the shares, down 3p to 83p, on a prospective P/E of just under 10, assuming a 34 per cent tax charge.

Gieves surges but gives warning

PROFITS, before tax, of Gieves Group, tailor and outfitter, publisher, motor dealer, surged from £739,144 to £1.23m for the year ended January 31, with second half figures increasing from £618,000 to £738,000.

Mr Michael Keeling, chairman, says that the year "was one in which nearly everything went right, with all four divisions pro-*ducing improved* results."

After a tax charge of £219,940, against a credit of £317,309, net profits were £1.01m (£1.06m) giving lower earnings of 17.3p (18p) per 20p share. The dividend, however, is boosted to 3.75p (2.25p) with a 2.65p final.

The directors state, however, that in his annual statement accompanying the accounts, Mr Keeling, chairman, will refer to expansion plans for the three largest divisions which may initially result in a reduction in the operating profits of one or more of these sectors.

"Accordingly, it is sensible to think in terms of the group earning slightly lower profits in the current year — perhaps in the region of £1m before tax." The directors add that a reduction of this order would not have any adverse impact on the level of dividends which would still be adequately covered.

A breakdown of the group's principal activities giving both turnover and operating profits— £1.32m (£820,693) — shows: tailors and outfitters £7.63m (£7.17m) and £535,456 (£332,367); book and magazine manufacturers £7.58m (£6.76m) and £480,102 (£289,390); publishers and library suppliers £3.44m (£2.65m) and £393,078 (£254,613); motor and petrol retailers £5.93m (£5.74) and £106,479 (£104,194); central expenses of the parent company took £196,480 (£159,871).

The pre-tax figure was after lower interest payable, less receivable of £84,084 (£149,877), and consequential loss insurance proceeds of £68,328 credit last time.

SECTION III – INTERNATIONAL MARKETS

FINANCIAL TIMES

Wednesday May 9 1984

Lower copper prices reflect New York losses, Page 38

WALL STREET

Brave effort made to stage rally

A BRAVE attempt was made by Wall Street financial markets yesterday to stage the traditional rally into the Treasury funding season, despite the further upward pressures on short-term rates which were signalled by increases in prime rates by the major banks, *writes Terry Byland in New York.*

The stock market moved higher at midsession although trading was subdued and the institutions played a cautious role.

The Dow Jones industrial average closed 9.74 up at 1,176.30.

Turnover was sluggish, however, and the market rally was slow to spread into the broader range of the market. The American Stock Exchange index showed only a minor gain.

Bond prices also steadied after the heavy setback of the past week but retail investment remained almost non-existent as the traders braced themselves for the first leg of the Treasury funding programme.

Few difficulties were expected with the auction during the session of $6.5bn in three-year treasury notes. The problems will come with today's sale of $5.25bn of 10-year notes and tomorrow's $4.75bn in 30-year bonds. The 30-year bonds traded in the when-issued market at a yield of 13.20 per cent.

The stock market opened lower but seemed relieved to have the expected increases in bank primes out of the way. Similarly, stocks appeared to have discounted higher rates at the Treasury auctions, which have now been clearly signalled by the 13 per cent-plus yields in the when-issued bond market.

A major boost to the stock market

The closing report on Wall Street and updated U.S. market monitors were not available because of continuing industrial action at the Financial Times' printers in Frankfurt.

came from an increase in the quarterly dividend by General Motors, which reminded investors that the immediate future is one bright with strong corporate results.

The U.S. National Association of Purchasing Management also disclosed that a survey of its members showed they expect the economy to remain strong for at least 12 months.

IBM, which said it was introducing a new business cabling system, gained $⅝ to $113⅞. General Motors put on $⅜ to $64⅞ on its dividend news. There was a sprinkling of gains in technology issues, including Texas Instruments, $1 up at $145, Honeywell, $⅛ up at $56⅛.

Shell Oil traded $¼ off at $58 as the bid from the parent group came to its head. City Investing, the insurance and housing group which will today disclose details of a buyout approach, remained at the overnight price of $37⅛. R. J. Reynolds, number two in the U.S. cigarette market, eased $⅛ to $62½, awaiting news on bid rumours.

Other features included British Petroleum, $⅛ down at $27⅞ after confirming a dry well in the China Sea and Continental Illinois which held steady after firmly denying rumours in the New York and Chicago markets that it intended to file under Chapter 11 of the Bankruptcy Act.

The round of prime rate rises followed a jump in rates at the weekly Treasury bill auction to the highest levels since August 1982. The rush to the short end, which brought a warning on rates from Mr Martin Feldstein, the President's economic adviser, produced gains of 30 basis points in money market rates. The federal funds rate traded at 11⅛ per cent, when the Fed announced overnight system repurchases.

The bond market rallied at midsession when the key long bond moved up by about half a point to 91$^{25}/_{32}$ after reports of a favourable outcome to the Treasury auction of 3-year notes. The improvement also reflected adjustments by traders to retail trading in the when-issued market ahead of tomorrow's auction of 30-year issues.

LONDON

Money data fail to calm nervousness

BETTER-than-expected UK money supply figures failed to calm the bout of nerves in London that accompanied rising U.S. interest rates and which left the FT Industrial Ordinary index down 10.6 at 904.8.

Gilt-edged securities also spent a troubled session with early nervous selling of both short and longer-dated stocks. Some cheap buying brought temporary relief but by the close longs were down ¾ – around the day's lows.

Some low coupon shorts lost ⅜ while higher coupon issues gave up ⅛.

Most equity sectors encountered only light selling but the fall in values largely reflected defensive action on the part of dealers. The continued absence of any real demand, however, suggested some loss of confidence by investors, if only for the time being.

Chief price changes, Page 32; Details, Page 33; Share information service, Pages 34–35

HONG KONG

SOME bargain hunting in otherwise quiet conditions enabled Hong Kong to reverse the previous day's sharp decline, although many investors are staying out of the market ahead of next week's parliamentary debate in London on the colony's future.

The Hang Seng index added 15.95 at 969.65 after Monday's 51.09 decline.

Hongkong Bank added 10 cents to HK$6.60 as its chairman announced better results for the first quarter and told the annual shareholders' meeting that 1984 was likely to be a year of further progress.

SINGAPORE

CONCERN over political developments continued to undermine activity in Singapore, leaving the Straits Times index down 4.05 at 978.48.

Turnover dipped to 6m shares compared with Monday's 8.1m, although it was suggested that if pre-arranged block trades were excluded, only about 100,000 shares changed hands freely on the exchange floor.

AUSTRALIA

WEAK metal prices in New York and exaggerated declines in the thin market left shares sharply lower in early Sydney trading. However, a slightly firmer gold price in Hong Kong and expectations of revived demand from London provided a boost later. The All Ordinaries index ended down 4.2 at 750.9.

MIM Holdings shed 8 cents to A$3.32 after its announcement of an A$9.6m after-tax loss for the 16 weeks to April 1.

CRA was down 4 cents to A$5.90 as its chairman told the annual meeting that while group earnings were currently ahead of the 1983 level, forecasts for the year were difficult because of marked fluctuations in metals prices and exchange rates.

SOUTH AFRICA

THE continued decline in world bullion prices left gold shares at or near their day's lows in Johannesburg.

President Steyn fell R2 to R66 and Free State Geduld R2.25 to R47.5.

Mining financials and other minings shadowed golds but platinums and diamond shares showed some resistance. Rustenburg Platinum held its loss to 10 cents at R14.95 and De Beers shed 2 cents to R9.35. Industrials also tended easier.

CANADA

SHARES were mixed in Toronto with investor enthusiasm dampened by prime rate rises in Canada and the U.S. Some of the best gains were seen among base metals and minerals while golds also managed an advance. Oil and gas issues, however, were marginally lower.

Montreal turned fractionally easier overall with small declines seen in most of the stock indices.

TOKYO

Weaker yen proves a disincentive

THE WEAKER yen dragged shares down almost across the board in Tokyo yesterday, sending the Nikkei-Dow Jones market average sharply lower, *writes Shigeo Nishiwaki of Jiji Press.*

Early in the session, investors sold heavy electricals like Hitachi and Toshiba and some high-priced light electricals, while textiles, non-ferrous metals and oils fell on small-lot selling. Only incentive-backed issues attracted buyers.

The index declined virtually throughout the day to finish 106.52 down at 11,052.44. Volume shrank to 361.55m shares from 491.13m the previous day. Losers outpaced gainers by 501 to 229.

Many investors had expected Wall Street to continue rising, which would have stimulated foreign buying and buoyed the market performance in Tokyo. But they were disappointed by New York's modest performance after last week's severe setback and the yen's continued slide against the dollar in reaction to higher U.S. interest rates.

Some leading securities houses attempted to turn investor attention to big-capital steel and heavy electrical issues. But an absence of active foreign buying proved to be a disincentive. Sumitomo Metal Industries shed Y5 to Y191, Mitsubishi Heavy Industries Y5 to Y261 and Ishikawajima-Harima Industries Y6 to Y169.

Blue-chip issues slipped over a broad front. Toshiba was hit by a bout of small-lot selling and fell Y19 to Y425 on news of technical trouble with a broadcasting satellite it had manufactured.

International populars suffered a similar fate. Hitachi lost Y14 to Y938, Matsushita Electric Industrial Y20 to Y1,960 and Toyota Motor Y20 to Y1,440.

Sumitomo Metal Mining led the decline in non-ferrous metal issues, falling Y70 to Y1,790, while many textile, chemical and oil shares lost ground.

Despite the depressed market, Mochida Pharmaceutical benefited from brisk buying, and soared Y400 to Y5,350, spurred by its development of an anti-cancer drug. Onoda Cement advanced Y4 to Y284 after disclosing an ambitious plan to expand its software business.

The bond market weakened further, which was attributed to a plunge in U.S. Treasury bond prices and the sagging yen. Early in the morning, the Debt Consolidation Fund bought Y100bn of 7.5 per cent long-term government bonds due January 1993 in a move to support the market. As a result, the yield on the bond, which opened at a high of 7.325 per cent against the previous session's close of 7.255 per cent, dropped to 7.285 per cent.

EUROPE

Emphasis remains on rates

THE REALITY of higher U.S. interest rates arrived too late to affect trading on most European bourses as investors were busy licking their wounds incurred during the previous session.

A number of corporate results helped to disperse but not eradicate the gloom in **Frankfurt** which saw the Commerzbank index fall a further 2.4 to 1,035.6 after Monday's 9-point decline.

AEG, returning to profit for 1983 and forecasting further profits this year, gained DM 2.60 to DM 101.20, the first time in two months it has closed above DM 100.

Higher earnings for Siemens in the first half of the current year softened the harsh tone of the session and it closed 10 pfg down at DM 399.40.

The dollar's surge against the D-Mark, despite Bundesbank intervention, combined with fears of labour unrest among the metal and print unions to undermine sentiment.

Carmakers, many of which are located in areas likely to be hit by a strike, were weakened further. Porsche dipped DM 5 to DM 978, Daimler-Benz lost a further DM 3.30 to DM 580.20 and VW hit a new low for the year with a DM 2.30 fall to DM 196.20.

Bonds continued to slide by as much as 35 basis points as the Bundesbank bought DM 4.8m in public paper compared with DM 20.8m on Monday. The central bank also disclosed acceptance of DM 746.5m in tenders for three and four year notes issued by the Bundespost.

A senior member of the Bundesbank's Central Bank Council hinted that German interest rates may rise if a sustained outflow of funds to the U.S. develops, although this point had not yet been reached.

Brussels was affected by some leading stocks moving ex-dividend. They included EBES BFr 255 off at BFr 2,540, GB Inno BFr 235 down at BFr 3,070, Gevaert BFr 50 weaker at BFr 3,250, Société Genérale de Belgique BFr 65 lower at BFr 1,850 and Solvay BFr 340 down at BFr 6,500.

Elsewhere, Petrofina moved off its BFr 8,000 high for the year with a BFr 50 drop to BFr 7,950 and utility Electrobel gained BFr 70 to BFr 6,930, a new high for 1984. Fabrique Nationale continued weaker with a BFr 20 drop to BFr 2,150, and zinc producer

Small price movements over a broad front emerged in quiet **Amsterdam** despite Dutch institutional investor concern over the possibility of a collapse of the Government over the issue of cruise missiles.

Hoogovens rose Fl 2 to Fl 52.80, Gist-Brocades firmed Fl 1.70 to Fl 143 and Heineken a similar amount to Fl 134.

Marginally changed banks saw ABN rise 50 cents to Fl 370 and NMB hold stead at Fl 146. In late trading, Unilever shed 90 cents to Fl 263.60.

Bonds were unchanged in sluggish trading ahead of a possible state loan announcement today.

Caution in **Zurich** tended to keep most shares at their overnight levels. With investors worried about higher U.S. interest rates, price moves, when they occured, were small and difficult to maintain.

Swissair and banks opened higher but lost ground towards the close. The airline finished the day SwFr 10 up at SwFr 1,025.

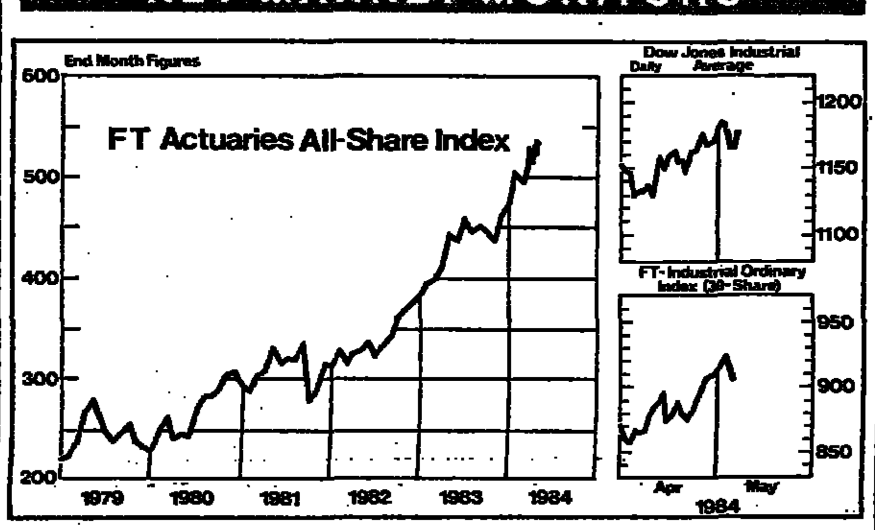
Other sectors were quiet and featureless although insurers fared well with Swiss Re adding SwFr 50 to SwFr 8,250.

Bonds weakened in the face of the stronger dollar.

Prices in **Milan** edged higher ahead of the Italian Banking Association's call for lower interest rates after Friday's 0.5 point cut in the discount rate to 15.5 per cent.

Madrid started its week higher and **Paris** was closed for a national holiday.

KEY MARKET MONITORS



STOCK MARKET INDICES

	May 8	Previous	Year ago
NEW YORK			
DJ Industrials	1176.30	1166.56	1232.59
DJ Transport	514.09	508.85	552.10
DJ Utilities	128.42	127.02	129.11
S&P Composite	160.52	159.47	166.10
LONDON			
FT Ind Ord	904.8	915.47	676.7
FT-SE 100	1117.6	1134.0	926.8
FT-A All-share	527.29	534.13	420.90
FT-A 500	576.10	583.97	458.53
FT Gold mines	632.8	665.1	677.0
FT-A Long gilt	10.52	10.45	10.44
TOKYO			
Nikkei-Dow	11052.44	11159.0	8670.64
Tokyo SE	868.21	874.50	634.17
AUSTRALIA			
All Ord.	750.9	755.1	586.5
Metals & Mins.	518.5	523.2	519.7
AUSTRIA			
Credit Aktien	54.87	54.95	59.24
BELGIUM			
Belgian SE	153.94	156.25	121.25
CANADA			
Toronto			
Composite	2335.0*	2324.5	2436.2
Montreal			
Industrials	n/a	n/a	416.10
Combined	n/a	n/a	405.18
DENMARK			
Copenhagen SE	198.79	202.09	140.86
FRANCE			
CAC Gen	closed	180.5	123.8
Ind. Tendance	closed	113.5	76.2
WEST GERMANY			
FAZ-Aktien	355.44	355.66	314.47
Commerzbank	1035.6	1038.0	940.4
HONG KONG			
Hang Seng	1069.65	953.70	986.71
ITALY			
Banca Comm.	212.54	212.06	192.94
NETHERLANDS			
ANP-CBS Gen	164.5	164.0	126.2
ANP-CBS Ind	131.5	131.3	104.1
NORWAY			
Oslo SE	294.28	293.41	190.18
SINGAPORE			
Straits Times	978.48	982.53	960.41
SOUTH AFRICA			
Golds	n/a	941.9	930.0
Industrials	n/a	1086.3	908.0
SPAIN			
Madrid SE	119.67	118.73	113.27
SWEDEN			
J & P	1536.10	1535.73	1426.88
SWITZERLAND			
Swiss Bank Ind	383.2	382.9	329.1
WORLD	May 7	Prev	Year ago
Capital Int'l	188.5	189.2	177.3

GOLD (per ounce)

	May 8	Prev
London	$372.25	$376.75
Frankfurt	$372.00	n/a
Zürich	$371.00	n/a
Paris (fixing)	closed	n/a
Luxembourg (fixing)	$372.30	n/a
New York (May)	$373.60	$371.90

* Latest available figure

CURRENCIES

	U.S. DOLLAR		STERLING	
(London)	May 8	Previous	May 8	Previous
$	–	–	1.3835	1.4095
DM	2.782	2.7205	3.85	3.8375
Yen	229.0	226.75	317.0	320.0
FFr	8.5325	8.3525	11.8	11.77
SwFr	2.281	2.249	3.1575	3.17
Guilder	3.125	3.061	4.325	4.315
Lira	1716.5	1682.0	2374.0	2370.0
BFr	56.53	55.49	78.2	78.2
C$	1.29625	1.26925	1.7925	1.8205

INTEREST RATES

	May 8	Prev
Euro-currencies (3-month offered rate)		
£	9⅛	9⅛
SwFr	4⅛	3$^{15}/_{16}$
DM	5$^{15}/_{16}$	5⅞
FFr	12⅛	12⅛
FT London Interbank fixing (offered rate)		
3-month U.S.$	11$^{15}/_{16}$	11⅛
6-month U.S.$	12⅛	11$^{7}/_{16}$
U.S. Fed Funds	10⅞	10⅝
U.S. 3-month CDs	11.10	10.85
U.S. 3-month T-bills	10.05	9.85

U.S. BONDS

Treasury		May 8* Price	Yield	Prev Price	Yield
11⅛	1986	99$^{1}/_{32}$	12.20	99$^{9}/_{32}$	12.22
12⅜	1991	97⅛	13.01	96$^{29}/_{32}$	13.06
11.75	1993	93	13.06	92$^{13}/_{32}$	13.14
12	2013	91$^{25}/_{32}$	13.09	91⅛	13.18
Corporate		May 8* Price	Yield	Prev Price	Yield
AT & T 10⅜ June 1990		89⅞	12.80	89⅞	12.80
3⅞ July 1990		70⅞	10.50	70⅞	10.50
8⅞ May 2000		69⅞	13.65	69⅞	13.65
Xerox 10⅞ March 1993		86⅛	13.20	86⅛	13.20
Diamond Shamrock 10⅞ May 1993		85⅛	13.40	85⅛	13.40
Federated Dept Stores 10⅞ May 2013		79⅛	13.40	79⅛	13.40
Abbot Lab 11.80 Feb 2013		88⅛	13.35	88⅛	13.35
Alcoa 12⅛ Dec 2012		89⅛	13.75	89⅛	13.75

FINANCIAL FUTURES

CHICAGO	Latest	High	Low	Prev
U.S. Treasury Bonds (CBT) 8% 32nds of 100%				
June	63-17	63-21	63-02	63-07
U.S. Treasury Bills (IMM) $1m points of 100%				
June	89.64	89.65	89.51	89.61
Certificates of Deposit (IMM) $1m points of 100%				
June	88.60	88.62	88.44	88.64
LONDON				
Three-month Eurodollar $1m points of 100%				
June	88.35	88.48	88.32	88.74
20-year Notional Gilt £50,000 32nds of 100%				
June	104-26	105-19	104-24	105-16

COMMODITIES

(London)	May 8	Prev
Silver (spot fixing)	618.05p	640.80p
Copper (cash)	£1005.00	£1038.00
Coffee (May)	£2162.50	£2125.50
Oil (spot Arabian light)	$28.25	$28.30

NEW YORK STOCK EXCHANGE COMPOSITE CLOSING PRICES

12 Month High	Low	Stock	Div.	Yld.	P/ E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
20⅝	13⅛	AAR	.44	2.2	21	251	20⅜	19⅞	20¼	+ ⅛
53	31½	ACF	1.40	2.7	658	526	52⅞	52⅜	52⅜	− ⅜
22	15½	AMCA	n 1	5.5		1	18⅛	18⅛	18⅛	+ ⅛
18⅞	13⅛	AMF	.50	3.0		873	17⅛	16⅞	15⅞	− ⅜
51	49⅝	AMF	pf1.75e	3.4		1500	50¼	50¼	50¼	− ¼
41⅛	26	AMR Cp			7	6021	35⅞	34⅛	35¼	+ ⅞
20⅝	17½	AMR	pf2.18	11.		38	20	19⅞	20	+ ⅛
41½	29⅝	AMR	pf2.13	5.8		91	37⅞	38	36¼	+ 1½
28⅞	23	ANR	pf2.67	11		17	23¼	23¼	23¼	
23⅞	19½	ANR	pf2.12	9.9		2	21½	21½	21½	
16¼	7	APL			4	56	13⅛	13⅛	13⅛	− ⅛
55⅞	40⅞	ARA	2.10	4.4	10	543	47¼	46¼	47¼	− 2
77¼	50⅞	ASA	3a	4.9		688	62¼	61¼	61½	− ½
33¼	17	AVX	s .32	1.5	16	50	21⅛	21	21⅛	
53⅞	38⅞	AbtLab	1.20	2.7	15	1059	43⅞	43¼	43¼	+ ¼
30¼	23⅛	AccoWd	.60	2.2	18	127	27⅛	26⅞	27¼	+ ¼
27½	20	AcmeC	.40	1.9		13	21⅛	21⅛	21⅛	
13	8⅞	AcmeE	.32b	3.2	27	17	10	9⅞	9⅞	
24⅞	12⅞	AdmDg	.04	.3	8	43	14⅛	13⅞	14⅛	+ ⅛
18⅞	15⅛	AdaEx	2.11e	13		41	16	15⅞	15⅞	
19¼	11	AdmMl	.29	1.7	8	16	16¼	16½	16¼	+ ⅛
22	14½	AdvSys	.811	4.9	16	23	16½	16½	16½	
18½	8⅞	Advest	.12	1.2	12	24	9⅞	9⅞	9⅞	
37½	21⅞	AMD	s		27	3176	33¼	32	33	+ ⅞

Continued on Page 31

هكذا من الأصل

AMERICAN STOCK EXCHANGE COMPOSITE CLOSING PRICES

12 Month High	Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Continued on Page 32

NEW YORK STOCK EXCHANGE COMPOSITE CLOSING PRICES

Continued from Page 30

12 Month High	Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22¼	16½	Wynns	.60	3.0	11	60	20¼	19¾	19¾	−⅞
		X-Y-Z								
52⅛	38⅝	Xerox	3	7.5	9	2895	40⅝	39½	40	−¼
53½	47	Xerox	pf5.45	11		665	49¼	49	49¼	+¼
37	21⅛	XTRA		2.6	10	255	24¾	24½	24¼	−½
34	24	ZaleCp	1.26	4.7	11	46	26¾	26	26¾	−¼
26½	18½	ZaleplA	.80	4.0		3	20¼	20¼	20¼	+⅛
24⅞	15¾	Zapata	.84	3.6	14	1098	23⅞	23	23½	+½
47½	28¾	Zayre	s .40b	1.1	11	276	35¾	34½	35⅜	+⅝
38⅝	20½	ZenithE			12	1296	29⅞	29½	29¾	+⅛
27⅞	19⅞	Zero	s .36	1.7	18	96	21¼	20½	21¼	+¼
37¾	21⅛	Zurnin	1.32	5.6	10	14	23⅝	23⅜	23⅜	−⅛

Sales figures are unofficial. Yearly highs and lows reflect the previous 52 weeks plus the current week, but not the latest trading day. Where a split or stock dividend amounting to 25 per cent or more has been paid, the year's high-low range and dividend are shown for the new stock only. Unless otherwise noted, rates of dividends are annual disbursements based on the latest declaration.

a–dividend also extra(s). b–annual rate of dividend plus stock dividend. c–liquidating dividend. cld–called. d–new yearly low. e–dividend declared or paid in preceding 12 months. g–dividend in Canadian funds, subject to 15% non-residence tax. i–dividend declared after split-up or stock dividend. j–dividend paid this year, omitted, deferred, or no action taken at latest dividend meeting. k–dividend declared or paid this year, an accumulative issue with dividends in arrears. n–new issue in the past 52 weeks. The high-low range begins with the start of trading. nd–next day delivery. P/E–price-earnings ratio. r–dividend declared or paid in preceding 12 months, plus stock dividend. s–stock split. Dividends begins with date of split. sls–sales. t–dividend paid in stock in preceding 12 months, estimated cash value on ex-dividend or ex-distribution date. u–new yearly high. v–trading halted. vi–in bankruptcy or receivership or being reorganised under the Bankruptcy Act, or securities assumed by such companies. wd–when distributed. wi–when issued. ww–with warrants. x–ex-dividend or ex-rights. xdis–ex-distribution. xw–without warrants. y–ex-dividend and sales in full. yld–yield. z–sales in full.

WORLD STOCK MARKETS

AUSTRIA

May. 8	Price Schs.	+ or −
Creditanstalt	213	
Gosser	386	−2
Interunfall	407	
Laenderbank	205	
Perlmooser	363	+3
Steyr-Daimler	149	
Veitscher Mag	217	

BELGIUM/LUXEMBOURG

May 8	Price Frs.	+ or −
ARBED	1,840	+45
Banq Int A Lux	5,000	
Bekaert B	4,275	+75
Ciment CBR	2,350	
Cockerill	321	
Delhaize	4,670	−20
EBES	2,540	−25
Electrobel	5,650	
Fabrique Nat	2,150	−20
GB Inno BM	3,070	−25
GBL (Brux)	2,380	+20
Gevaert	3,260	−10
Hoboken	5,500	+40
Intercom	2,180	+15
Kredietbank	7,120	
Pan Hldgs	6,960	−50
Petrofina	7,950	−50
Royale Belge	9,150	
Soc. Gen. Banq	3,205	+5
Soc. Gen. Belge	1,850	−55
Sofina	5,300	−40
Solvay	4,155	+5
Traction Elec	3,640	+10
UCB	5,210	−30
Vieille Mont	4,140	−110

DENMARK

May 8	Price Knr %	+ or −
Aarhus Olie	410	
Andelsbanken	244	−11
Baltic Skand	685	−20
CopHandelsbank	242	
D. Sukkerfab	665	−15
Danske Bank	241	−1
East Asiatic	176	−4
Forenede Brygg.	975	−20
Forenede Damp.	160	
GNT Hldg	555	
I.S.S.B.	625	
Jyske Bank	540	−10
Novo Ind	2,530	−35
Privatbanken	253	−7
Provinsbanken	345	+5
Smidth (F)	218	
Sophus Berend.	1,190	
Superfos	505	−6

FRANCE

May 7	Price Frs.	+ or −
Emprunt 4½% 1973	1,829	+7
Emprunt 7% 1973	9,552	−47
CNE 3%	3,485	+5
Air Liquide	572	−3
BIC	448	−1
Bouygues	723	−24
BSN Gervais	2,765	−25
CIT-Alcatel	1,370	−15
Carrefour	1,815	−25
Club Mediter'n	926	+7
CFAO	715	−5
Cie Bancaire	520	−5
Cofimeg	229	+5.5
Creusot Loire	31.1	−1.4
Darty	968	−7
Dumez S.A.	740	−3
Eaux (Cie Gen)	580	−10
Elf-Aquitaine	272.1	+0.6
Gen. Occidentale	656	+15
Imetal	97	+3
Lafarge Coppee	390	+3.5
L'Oreal	2,504	−41
Legrand	1,981	−34
Maisons Phenix	250	
Matra S.A.	1,515	−5
Michelin B	842	−8
Midi (Cie)	1,610	−29
Moet-Hennessy	1,650	−9
Moulinex	103.3	−0.7
Nord Est	50	−1
Pernod Ricard	790	−5
Perrier	542	−8
Petroles Fra.	298	+17
Peugeot S.A.	254	+3
Poclain	45.7	
Printemps Au	165	−2
Radiotech	320	+5
Redoute	1,230	−60
Roussel-Uclaf	1,116	−24
Schneider S.A.	100	−2.5
Sefimeg	265	+4.2
Skis Rossignol	1,413	
Telemech Elect.	1,740	−22
Thompson (CSF)	305	−5
Valeo	275	−1

GERMANY

May 8	Price Dm.	+ or −
AEG-Telef	101.2	+2.6
Allianz Vers	787	−2
BASF	166.7	−0.7
Bayer	171	+0.7
Bayer-Hypo	298	+2
Bayer-Verein	334.5	+3
BHF-Bank	281	
BMW	393	−2
Brown Boveri	215.2	−0.8
Commerzbank	173.7	+1.7
Cont'l Gummi	129.2	+0.2
Daimler Benz	560.2	−3.3
Degussa	372xr	+7
Demag	146	
D'sche Babcock	161.5	+2.5
Deutsche Bank	383.5	+1.3
Dresdner Bank	174.5	+1.5
GHH	146	+0.9
Hochtief	513	−15
Hoechst	168	
Hoesch Werke	115.8	+0.6
Holzmann (P)	435	+8
Horten	195.5	−0.6
Kali und Salz	197.5	−4.5
Karstadt	262.5	−2.7
Kaufhof	246.5	−1.5
KHD	250.5	−0.5
Kloeckner	58	−1.8
Krupp	78	+2
Linde	384.2	−6.8
Lufthansa	150.5	−1.6
MAN	150	+4
Mannesmann	148.5	−1.1
Mercedes Hld	505.5	+0.5
Metallgesell	243	+3
Muench Rueck	1,140	−5
Preussag	274	
Rhein West Elect	163.5	+0.8
Rosenthal	229	−1
Schering	347.5	+1.5
Siemens	399.4	−0.1
Thyssen	84.5	+0.3
Varta	169.5	+0.5
Veba	171.4	+1.4
V.E.W	120.6	−0.7
Verein-West	300	
Volkswagen	196.2	−2.3

ITALY

May 8	Price Lire	+ or −
Banca Com'le	34,005	+205
Bastogi IRBS	138.2	+0.2
Centrale	1,779	+39
Credito Varesino	4,870	−180
Fiat	4,240	+27
Finsider	37.4	−0.6
Generali Assicur	36,170	+200
Invest	3,295	+15
Italcementi	48,300	+350
Montedison	212.4	−1.6
Olivetti	4,730	+19
Pirelli Co	2,970	+32
Pirelli Spa	1,506	−17
Snia BPD	1,569	+13
Toro Assic.	11,720	+110
do. Pref.	9,180	+180

NETHERLANDS

May 8	Price Fls	+ or −
ACF Holding	185	
AEGON	130.5	+1
Ahold	190.5	+0.5
AKZO	95.2	+0.2
ABN	370	+0.5
AMEV	183.8	+1
AMRO	66.3	−0.2
Bredero Cert	207.5	+0.5
Bos Kalis Westm.	32.1	−0.3
Buehrmann-Tet.	72.5	−0.5
Calland Hldgs.	36.5	−0.2
Credit Lyon'is Bk	57.8	−0.1
Elsevier-NDU	89.2	+0.4
Gist. Brocades	143	+1.7
Heineken	134	+1.7
Hoogovens	52.8	+2
Hunter Douglas	26.1	−0.2
Int Mueller	40	+1.2
KLM	173.7	+0.2
Naarden	40	−1
Nat Ned Cert	226	−1
Ned. Credit Bank	40	
Ned Mid Bank	146	
Nedlloyd	123.5	
Oce Grinten.	242.2	−1.8
Ommeren (Van.)	30.8	+0.3
Pakhoed	65	+1.4
Philips	47.4	+0.3
Rijn-Schelde	3	
Robeco	65.9	−0.2
Rodamco	135.7	+0.1
Rolinco	64.5	+0.3
Rorento	202.4	−0.5
Royal Dutch	159.9	−0.3
Unilever	263.6	−0.9
VMF Stork	117	+5
VNU	154.8	+0.3
West Utr Bank	94.5	+2

NOTES — Prices on this page are as quoted on the individual exchanges and are last traded prices. ‡ Dealings suspended. xd Ex dividend. xc Ex scrip issue. xr Ex rights. xa Ex all.

NORWAY

May. 8	Price Kroner	+ or −
Bergen Bank	184	
Borregaard	330	−5
Christiania Bk.	184	+4
Den Norsk Credit	188.5	+6
Elkem	168	+0.5
Norsk Data	323	+3
Norsk Hydro	664	+16.5
Storebrand	278.5	+12.5

SPAIN

May. 8	Price Pts%	+ or −
Bco Bilbao	318	+4
Bco Central	321	
Bco Exterior	207	
Bco Hispano	228	−1
Bco Santander	300	
Bco Vizcaya	377	
Dragados	156	+7
Hidrola	49.7	+1.2
Iberduero	57.5	+0.3
Petroleos	118	+2
Telefonica	85.5	+1.3

SWEDEN

May 8	Price Kronor	+ or −
AGA	373	+3
Alfa-Laval	270	−15
ASEA (Free)	360	
Astra (Free)	520	
Atlas Copco	198	−1
Boliden	446	
Cardo (Free)	411	
Cellulosa	162	
Electrolux B	280	+2
Ericsson	329	+2
Essalte	338	+3
Mo Och Domsjo	675	
Pharmacia	274	+3
Saab-Scania	425	+5
Sandvik	395	−5
Skandia	385	
Skan Enskilda	347	+2
SKF	320	+3
St. Kopparbergs	750	−15
Sven Handelsbn.	203	
Swedish Match	260	−6
Volvo B (Free)	493	+10

SWITZERLAND

May 8	Price Frs.	+ or −
Alusuisse	825	−2
Bank Leu	4,000	+50
Brown Boveri	1,400	−20
Ciba Geigy	2,370	−15
do. (Part Certs)	1,805	+5
Credit Suisse	2,300	−15
Elektrowatt	2,680	
Fischer (Geo.)	638	
Genevoise	4,025	−25
Hoff-Roche PtCts	104,750	−250
Hoff-Roche 1/10	10,475	
Jacobs Suchard	6,735	−75
Jelmoli	1,850	
Landis & Gyr	1,415	
Nestle	5,460	+5
Oer-Buehrle	1,235	−10
Pirelli	350	−2
Sandoz (Br)	6,800	+10
Sandoz (PtCts)	1,065	+25
Schindler (PtCts)	570	−10
Swissair	1,025	+10
Swiss Bank	350	
Swiss Reinsce	8,250	+50
Swiss Volksbk	1,460	+10
Union Bank	3,605	
Winterthur	3,010	−40
Zurich Ins	18,400	

AUSTRALIA

May. 8	Price Aust $.	+ or −
ANZ Group	5.74	
Acrow Aust.	1.6	
Alliance Oil D.	0.73	−0.02
Ampol Pet	1.75	
Aust Cons Ind	1.85	−0.01
Aust. Guarant	2.7	−0.1
Aust. Nat. Inds	2.7	+0.01
Aust. Paper	2.05	
Bell Group	5.54	
Bond Corp Hldgs	1.25	−0.05
Boral	3.57	−0.03
B'ville Copper	2.42	−0.05
Brambles Inds	3.95	
Bridge Oil	2.8	−0.05
BHP	11.15xa	−0.15
CRA	5.9	−0.04
CSR	3.7	−0.02
Carlton Utd	4.1	−0.05
Castlemaine Tys.	4.5	−0.05
Coles (G.J.)	3.78	−0.07
Comalco "A"	3.0	−0.05
Consolidated Pet	0.7	−0.02
Costain Aust.	1.28	−0.07
Dunlop Aust.	1.7	
E.Z. Inds.	5.46	+0.06
Elders IXL	4.05	+0.02
Energy Res.	1.4	−0.02

AUSTRALIA (continued)

May. 8	Price Aust. $	+ or −
Gen Prop Trust	2.12	
Hardie (J.)	3.35	−0.01
Hartogen Energy	2.85	
HeraldW'y Times	3.4	
ICI Aust	2.1	−0.02
Jimb'lana(50cFP)	0.29	
Kia Ora Gold	0.16	
Lend Lease	4.9	−0.02
MIM	3.32	−0.08
Mayne Nickless	2.4	
Meekatharra	0.75	
Myer Emp	1.93	+0.02
Nat. Com. Bk.	3.57	+0.01
News	11	
Nicholas Kiwi	2.78	−0.02
North Bkn Hill	2.6	−0.05
Oakbridge	0.93	−0.01
Otter Expl.	0.66	−0.01
Pancont'l	1.46	+0.03
Pioneer Conc.	1.6	+0.02
Reckitt & Coln	2.55	−0.05
Repco	1.19	−0.01
Santos	6.6	−0.1
Smith (H.)	3.87	+0.02
Southland Min'g.	0.39	
Spargos Expl.	0.35	
Thos. Natwide	1.9	−0.04
Tooth	5.2	
Vamgas	3.3	−0.05
Western Mining	4.05	−0.07
Westpac	3.9	+0.03
Woodside Petrol.	1.25	−0.03
Woolworths	2.33	−0.02
Wormald Intl.	3.22	+0.02

HONG KONG

May. 8	Price H.K.$	+ or −
Bank East Asia	22	
Cheung Kong	8.6	+0.15
China Light	11.1	+0.5
Hang Lung Devel	2.45	
Hang Seng Bank	36	+0.5
HK Electric	5.45	+0.1
HK Kowloon Wh.	3.7	+0.1
HK Land	3.12	+0.05
HK Shanghai Bk.	6.6	+0.1
HK Telephone	41.5	−2
Hutchison Wpa.	15.5	+0.2
Jardine Math	9.65	+0.05
New World Dev.	3.17	−0.15
Orient O'seas.	2.4	+0.08
O'seas Trust Bk.	3.05	−0.12
SHK Props	6.35	+0.2
Swire Pac A	15.4	
Wheel'k Mard A.	3.4	+0.08
Wheel'k M'time	1.9	
World Int. Hldgs.	1.94	−0.11

JAPAN

May. 8	Price Yen	+ or −
Ajinomoto	1,130	−10
Alps Electric	2,530	−20
Amada	1,350	
Asahi Chem	587	−12
Asahi Glass	800	−19
Bridgestone	627	−3
Canon	1,350	−20
Casio Comp.	1,310	
Chugai Pharm	1,080	−20
Citizen	569	−11
Daiei	678	−7
Dai Nippon Ptg	1,100	
Daiwa House	496	+11
Ebara	325	
Eisai	1,100	+60
Fanuc	9,150	−210
Fuji Bank	1,050	
Fuji Film	1,740	−10
Fujisawa	800	+7
Fujitsu	1,300	−20
Green Cross	1,860	−60
Hasegawa	375	−5
Heiwa Real Est.	613	−3
Hitachi	938	−14
Hitachi Credit	1,700	−50
Honda	1,230	−30
House Food	771	−2
Hoya	2,000	−50
Itoh (C)	331	+6
Ito.Yokado	2,040	−20
Iwatsu	1,750	−40
JACCS	382	+2
JAL	2,900	+40
Jusco	815	−1
Kajima	297	−1
Kao Soap	806	−14
Kashiyama	635	+10
Kirin	612	−11
Kokuyo	1,090	
Komatsu	501	−2
Konishiroku	623	−1
Kubota	311	−9
Kumagai	466	−2
Kyoto Ceramic	6,100	−50
Maeda Const	525	−1
Makino Milling	1,430	−20
Makita	1,080	−50
Marubeni	369	+3
Marudai	640	−10
Marui	1,280	−30
MEI	1,960	−20
M'ta Elec Works	776	+3
M'bishi Bank	1,040	
M'bishi Corp.	550	
M'bishi Elec.	433	−7
M'bishi Estate	557	−2

JAPAN (continued)

May. 8	Price Yen	+ or −
MHI	261	−5
Mitsui Co.	367	−10
Mitsui Estate	758	−2
Mitsukoshi	345	+4
NGK Insulators	790	−34
Nihon Cement	225	−1
Nippon Denso	1,620	−10
Nippon Elect.	1,350	−10
Nippon Express	385	−3
Nippon Gakki	627	−3
Nippon Kokan	160	+1
Nippon Oil	1,180	−30
Nippon Seiko	615	−10
Nippon Shimpan	630	−6
Nippon Steel	163	−2
Nippon Suisan	343	+1
NTV	12,850	+450
Nippon Yusen	250	
Nissan Motor	668	
Nisshin Flour	435	−2
Nisshin Steel	224	−3
Nomura	862	−24
Olympus	885	
Omron Tateisi	2,270	−70
Orient Leasing	4,000	−40
Pioneer	2,590	−60
Renown	640	−60
Ricoh	1,060	−20
Sankyo	690	−11
Sanyo Elect.	529	+1
Sapporo	480	−10
Sekisui Prefab	586	+6
Seven-Eleven	8,970	−30
Sharp	1,200	+10
Shimadzu	590	−17
Shionogi	610	−4
Shiseido	1,220	
Sony	3,580	
Stanley	803	
S'tmo Bank	1,150	−50
S'tomo Elect.	916	−3
S'tomo Marine	505	−9
S'tomo Metal	191	−5
Taihei Dengyo	491	
Taisei Corp.	218	+3
Taisho Pharm.	980	−40
Takeda	706	−14
TDK	5,800	−30
Teijin	440	−10
Teikoku Oil	740	−12
Tokyo Marine	655	
TBS	885	−14
Tokyo Elect Pwr.	1,340	
Tokyo Gas	180	+2
Tokyo Sanyo	816	−19
Tokyo Style	768	+8
Tokyu Corp.	325	+1
Toppan Print	813	−12
Toray	474	−9
Toshiba Elect.	425	−19
TOTO	540	−9
Toyo Seikan	820	
Toyota Motor	1,440	−20
Victor	2,830	−90
Wacoal	810	
Yamaha	516	−2
Yamanouchi	1,340	−10
Yamazaki	740	
Yasuda Fire	346	−4
Yokogawa Bdge.	422	−3

SINGAPORE

May. 8	Price $	+ or −
Boustead Hldgs.	2.62	+0.04
Cold Storage	3.88	
DBS	9.75	
Fraser & Neave	6.05	−0.05
Genting	5.5	
Haw Par. Bros	2.52	−0.03
Inchcape Bhd.	2.92	
Keppel Shipyard	2.98	−0.02
Malay Banking	9.9	
Malay Brew.	6.75	
Multi Purpose	1.88	−0.02
OCBC	10.3	−0.1
OUB	4.38	+0.02
Sime Darby	2.42	+0.01
Straits St'mship.	1.52	−0.01
Straits Trdg.	5.75	
UOB	5.3	−0.05

SOUTH AFRICA

May. 8	Price Rand	+ or −
Abercom	2.15	−0.10
AE & CI	9.6	
Anglo Am Coal	31.5	
Anglo Am Corp.	23.6	−0.25
Anglo Am Gold	147.5	−4.5
Barclays Bank	22.25	
Barlow Rand	14.3	−0.2
Buffels	77.0	−2.75
CNA Gallo	3.45	
Currie Finance	5.5	
De Beers	9.35	−0.02
Driefontein	44	−1.55
FS Geduld	47.5	−2.25
Gold Fields S.A.	28.5	−1
Highveld Steel	6	
Nedbank	16.0	−0.4
OK Bazaars	18.25	−0.25
Protea Hldgs	2.95	−0.05
Rembrandt	26.75	−0.25
Rennies	14.5	−0.2
Rust. Plat.	14.95	−0.10
Sage Hldgs	8.2	+0.05
SA Brews	7.6	−0.56
Smith (C.G)	26.25	
Tongaat Hulett.	11.7	−0.3
Unisec	5.6	

CANADA

TORONTO
Prices at 2.30 pm May 8

Sales	Stock	High	Low	Close	Chng
[illegible]					
2650	Conventrs	385	385	385	
500	Conwest A	$10	10	10	+ ⅛
7101	Coseka R	380	375	375	
6050	Crownx	$15¼	15⅛	15½	− ⅛
7000	Czar Res	189	185	185	− 1
[illegible]					
1630	Labatt	$18¾	18¼	18¼	
12450	Lac Mnrls	$32⅞	32⅛	32⅛	+ ⅛
12500	Lacana	$13¼	13⅛	13¼	
22	LL Lac	$35⅞	35⅜	35⅜	−1⅛
260	Loblaw Co	$14⅜	14⅛	14⅜	+ ⅛
[illegible]					
1200	Sydney o	105	103	103	− 2
1000	Talcorp	120	120	120	
1000	Tara o	$17¼	17¼	17¼	− ¼
1200	Teck Cor A	$10¼	10½	10⅝	
1179	Teck B f	$10	9⅞	9⅞	− ⅛
[illegible]					

Total sales 6,133,055 shares

MONTREAL
Closing prices May 7

[illegible]

Total sales 2,563,282 shares

OVER-THE-COUNTER

Nasdaq national market, 3pm prices

Stock	Sales (Hnds)	High	Low	Last	Chng
[illegible]					

LONDON

Chief price changes
(In pence unless otherwise indicated)

RISES

Bolton Textile	24	+ 4
Garnar Booth	148	+ 18
Greenfields Leis	48	+ 11½
ICI	612	+ 14
Moss Bros.	345	+ 30
Tomkinsons	128	+ 8
Vosper	243	+ 18
Whitecroft	188	+ 8
Gulfstream Res.	58	+ 9
Malakoff Berh.	140	+ 14

FALLS

Fg 8½pc 1985/87	£90	− ⅝
Tr 9pc 2002/06	£81¾	− ¾
Akroyd & Smithers	535	− 25
BPB Inds	318	− 12
Blockleys	480	− 25
Davies & Newm.	200	− 10
Redland	298	− 7
Simon Eng.	473	− 20
St Chartered Bk	495	− 20
Tate & Lyle	409	− 8
Trafalgar House	255	− 9
BP	503	− 12
Britoil	243	− 12
Double Eagle	40	− 7
Eglinton Oil	228	− 17
LASMO	315	− 15
Ultramar	647	− 18
Lbanon Gold	£24⅞	− 1⅛
RTZ	645	− 12
St. Helena Gold	£22⅛	− 2⅛

Continued on Page 40

AMERICAN STOCK EXCHANGE CLOSING PRICES

Continued from Page 31

12 Month High	Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
[illegible]										

LONDON STOCK EXCHANGE

MARKET REPORT

U.S. rate rises make for nervous session in markets awaiting dearer UK credit

Account Dealing Dates

*First Dealings	Option Declarations	Last Dealings	Account Day
Apr 9	Apr 26	Apr 27	May 8
Apr 30	May 10	May 11	May 21
May 14	May 31	June 1	June 11

* "New-time" dealings may take place from 9.30 am two business days earlier.

Rising U.S. interest rates caused London financial markets to react nervously yesterday. Slightly more favourable UK money supply trends failed to stop the rout of both Government stocks and leading equities when dealings resumed here after Monday's May Day holiday. The former closed ¾ down in places, while the FT Industrial Ordinary share index came back 10.6 more to 904.8 from last Thursday's all-time peak.

Inflicting the damage was the mounting pressure for dearer U.S. credit. This has boosted the dollar and brought sterling down to its lowest-ever level against the currency amid growing fears of higher American rates. These were realised late yesterday when Chase Manhattan increased its Prime lending rate ½ to 12½ per cent. Other Prime lenders soon announced similar rises.

Last month's smaller-than-expected expansion in UK money growth—sterling M3 rose about ½ percentage point compared with estimates of possible one percentage point—was thought unlikely to defer clearing bank base rate increases. *Although* money market rates eased later yesterday, the clearers will probably announce rises this week of between ½ and 1 percentage point.

A troubled market in Gilt-edged securities met with early nervous selling of both short- and longer-dated stocks. The latter sustained fresh falls of ¾ before cheap buying and sporadic bear covering developed. The 2.30 pm announcement of banking April's money supply figures brought temporary relief but later in the afternoon quotations surrendered their recoveries ranging to ½, to close at the day's lowest.

Selected low-coupon shorts lost ⅛, while higher coupon issues gave up ½: the recently-issued tap stock, Treasury 9½ per cent Convertible 1989 fell the latter amount to 48⅝, a discount of 1⅛ on the issue price. Mirroring the weak trend, the FT Government Securities index fell 0.48 to 80.54, its worst level since September 9 last.

Most equity sectors encountered only light selling pressure, the fall in values largely reflecting defensive action on the part of dealers. The index was 8 points lower at the first calculation and 11.6 down at the day's worst before the eventual slight rally. The continued absence of any real demand, however, suggested that investors had lost confidence, if only for the time being.

Banks drift lower

The prospect of higher base lending rates failed to attract interest to the major clearing banks which drifted easier with the general trend. Barclays, 10 lower at 480p, led the retreat, while Lloyds slipped 9 to 603p. Midland, down 6 on Friday following a Press suggestion that it may acquire the 43 per cent minority interest of its troubled U.S. associate Crocker National, fell 7 more to 390p. Elsewhere, Standard Chartered lacked support and lost 20 to 495p.

With the exception of London United, which gained 3 to 213p in response to the results, Composite Insurances gave ground.

Bakery concern Greggs, which staged a highly successful market debut last week, encountered profit-taking and shed 7 to 163p, but USM-quoted Body Shop International attracted fresh support on bid hopes and put on 10 ot 205p.

Breweries succumbed to the surrounding malaise. Allied fell 4 to 166p and Bass lost 5 to 370p. Elsewhere, Distillers, the subject of much conjecture and speculative activity of late following GEC's acquisition of a near-3 per cent stake in the group, met with profit-taking and shed 5 to 306p.

Recently firm Building Material issues ran into selling at the outset and, although the tone appeared steadier by mid-afternoon, prices rarely moved away from the day's lowest levels. Redland came on offer at 296p, down 7, while BPB Industries gave up 12 at 318p. Blue Circle fell 7 to 418p and Tarmac shed 8 to 506p. Elsewhere, Blockleys, a *good* market *last* week on the disclosure that Tarmac had acquired a 17 per cent stake in the company as part of its deal with C. H. Beazer, came back 25 to 480p. Beazer, at 410p, lost 10 of last week's gain of 36. Among Contracting and Construction stocks, Costain revealed annual profits some £1m above market estimates, but the shares succumbed to the general malaise and closed 6 off at 286p.

After last week's fall of 32, ICI resisted the trend in blue chips and rose 14 to 612p on American bear closing.

Greenfield Leisure up

Greenfield Leisure stood out among secondary Stores, rising 11½ to 48p, after 49p, on news that a consortium, including Caparo Industries, had acquired a near-26 per cent stake in the company. A week-end Press suggestion that a sizeable stake in Bolton Textile is about to change hands left the latter 4 higher at 24p, while Moss Bros advanced 30 to 345p on Covent Garden redevelopment hopes. Speculative buying helped Alfred Preedy improve 5 to 103p and G. B. Castle found support at 97p, up 6. Dearer money worries deterred buying of the leaders. Marks and Spencer declined 4 to 259p and Gussies A lost 10 to 628p. Awaiting tomorrow's annual results, Debenhams cheapened 3 to 185p. Nervously sold last Friday in the wake of a broker's bearish review, British Home declined further to 216p following the annual figures, which were deemed satisfactory, before rallying to close only a penny cheaper on balance at 222p.

Shoes were highlighted by a leap of 18 to 148p in Garnar Booth following the bumper annual profits.

Among Electricals, Press suggestions of a possible rights issue left Amstrad 4 cheaper at 108p, but Arcoelectric hardened a couple of pence to 30p in response to weekend comment. Renewed nervous offerings left Arlen 8 lower at 42p, and USM counter, Miles 33, met with further profit-taking after the results to close 18 down at 240p.

Disappointment with the preliminary results, plus the cautious statement on outlook, prompted marked dullness in Simon Engineering which tumbled 20 to 473p. Elsewhere in the Engineering sector, Vosper contrasted with a rise of 18 to 243p in a limited market following the annual meeting. Babcock fell 5 to 170p and Westland a like amount to 172p, while Chemring closed 13 lower at 580p. Losses in the leaders were usually limited to a few pence, but Hawker were noteworthy for a fall of 8 to 450p.

Leading Foods fluctuated either side of lower opening levels. Tate and Lyle encountered more persistent selling than most and closed 8 down at the day's lowest of 400p; the interim results are due on May 30. Rowntree Mackintosh shed 6 more to 268p as bid hopes continued to fade.

Grand Metropolitan and Trusthouse Forte shed 4 apiece to 350p and 125p respectively in a subdued Hotels sector.

Trafalgar House ease

Falls in the miscellaneous industrials leaders ranged to 10 and occasionally more. Glaxo gave up 15 at 850p and BTR 10 at 479p, while Bowater were 6 lower at 306p. Trafalgar House eased 9 to 255p awaiting today's interim figures. BOC, due to announce half-year results tomorrow, reacted 3 to 293p. Elsewhere, Initial improved 8 further to 400p to the accompaniment of vague talk concerning BET's holding in the company. Speculative demand prompted a rise of a similar amount in Whitecroft, 166p, while Moben firmed a couple of pence to 24p following a newsletter recommendation. Smith and Nephew eased 5 to 228p after the first-quarter figures, while Bestwood closed 3 cheaper at 253p following the preliminary results. Arenson, on the other hand, firmed a penny to 22p reflecting the reduced interim loss and forecast of a return to profitable trading. Selling after the recent good figures left Davies and Newman 10 cheaper at 200p. Occasional offerings brought a reaction of 12 to 315p in Bestobell and of 8 to 200p in Low and Bonar. Midland Marts dipped 13 to 97p owing to disappointing annual figures.

Among Leisure issues, Barr and Wallace Arnold Trust A firmed 2 to 100p influenced by satisfactory annual results.

Reliant provided an isolated firm feature in Motors, rising 3 to 34p in anticipation of Friday's *interim figures. BL, however,* remained overshadowed by the disruption to Metro and Mini production at Longbridge and closed a further 3 easier at 65p. Elsewhere, Dowty gave up 6 at 131p.

Paper/Printings were notable for a rise of 12 to 154p in Associated Paper ahead of today's interim statement. More O'Ferrall hardened 2 to 82p on the results.

Properties encountered a fresh bout of scrappy selling. Land Securities settled a couple of pence off at 282p and MEPC finished 4 cheaper at 291p. Elsewhere, Percy Bilton fell 6 to a 1984 low of 218p, while Rosehaugh slipped 7 to 468p. Against the trend, Mountview rose 10 to 250p following Press comment and Five Oaks firmed 2 to 37p on the return to profitability. Irish property concern DAD Properties jumped 10 to 47p after the share-exchange offer from fellow Irish concern Rohan Group, 3 off at 217p.

Textiles plotted an irregular course in moderate trading. Tomkinsons reflected revived speculative demand with a rise of 8 to 128p, while John Crowther hardened 2 to 32p in response to satisfactory results. Richards were marked up to 39p on news of the strong interest profits recovery but later reacted to close a net 3 down on the day at 34p. A. Martin lacked support and fell 7 to 47p.

Recently bolstered by a broker's favourable review, Tobaccos showed signs of wilting. Bats fell 9 to 236p, but Imps held steady at 163p.

Stockjobbers Akroyd and Smithers fell 25 to 525p following the surprise 17 per cent contraction in first-half profits. Smith Bros dipped 4 to 118p, after 116p, in sympathy.

Ultramar decline

Apart from one or two minor gains inspired by weekend Press comment, the oil sector showed a preponderance of falls. The leaders were highlighted by Ultramar which dropped 18 to 647p ahead of the first-quarter results due today. LASMO encountered persistent selling and fell away to close 15 down at 315p, while falls of 12 were *common to BP and Britoil at* 503p and 243p respectively. Shell eased 6 to 647p and IC Gas gave up 5 at 312p.

The members of the Dorset Bidding Group all lost ground despite persistent rumours that the purchase of the 50 per cent interest in the Wytch Farm oil field will be announced later this week. Tricentrol retreated 6 to 215p, Carless Capel 4 to 243p and Premier Consolidated a penny to 56p.

Bristol Oil and Minerals were a firm market, however, and rose 4 to 57p reflecting favourable Press mention.

Sovereign Oil, a strong market late on Friday, reacted 10 to 309p in the wake of disappointing North Sea drilling report.

Far-Eastern buying prompted double figure gains in several Plantation issues. Malakoff advanced 14 to 140p and Anglo-Indonesian 13 to 203p, while Inch Kenneth jumped 40 to 915p. Among smaller-priced stocks, Malayan Plantations firmed 3 to 65p and Kulim 5 to 92p, the later after 94p.

Golds weak

Mining markets staged a broad retreat following the May Day holiday, depressed by the marked weakness throughout precious and base-metal prices. The renewed strength of the dollar and news of U.S. prime rate rises lowered the bullion price by $4.5 to a three-month low of $372.25 an ounce. It also encouraged widespread selling of South African Golds.

The Gold Mines index posted a 32.3 fall to 632.8—its lowest level since March 28 and its sixth *decline over the past seven trading days.*

South African Financials were similarly depressed. De Beers gave up 14 at 528p and associate "Anamint" £3 at £63, while Anglo American Corporation eased ⅜ to £13½ and Gencor a half-point to £15⅞. Gold Fields of South Africa lost a full point to £16, "Johnnies" £3 to £91 and the Bermuda-domiciled Minorco 20 to a year's low of 660p. Coal producer "Amcoal" moved against with general trend, edging up ¼ to a 1984 high of £17½ ahead of the preliminary results, expected next week.

London Financials were burdened by the downturn in metal prices and a sharp fall in UK equities. RTZ and Consolidated Gold Fields fell around 13 apiece to 645p and 563p respectively, while Charter Consolidated dipped 8 to 240p. Hampton Areas gave up 7 to 230p.

Heavy losses throughout Australians reflected Wall Street's recent poor performance as well as the weakness in metal prices. The third-quarter loss left MIM Holdings 13 lower at 217p, while falls of around 10 were common to CRA and Western Mining at 392p and 286p respectively. The continuing strike at Broken Hill encouraged further selling of North Broken Hill, which retreated 8 more to 170p.

Proceedings in the Traded Option market were dominated by activity in the new FTSE 100 index in which 893 calls and 1,042 puts were arranged out of a total of 4,745. Interest in FTSE put positions was particularly lively with the June 1125 and 1150 levels attracting 305 and 341 deals respectively.

FINANCIAL TIMES STOCK INDICES

	May 8	May 4	May 3	May 2	May 1	April 30	year ago
Government Secs	80.54	81.02	81.40	81.53	81.66	81.60	80.96
Fixed Interest	85.53	85.86	85.69	85.86	85.85	85.80	83.09
Industrial Ord	904.8	915.4	922.8	919.4	916.8	910.1	676.7
Gold Mines	632.8	665.1	671.4	668.5	672.9	676.6	677.0
Ord. Div. Yield	4.32	4.27	4.24	4.25	4.24	4.25	4.63
Earnings, Yld.% (full)	10.00	9.89	9.82	9.84	9.79	9.82	9.20
P/E Ratio (net) (*)	12.06	12.20	12.29	12.26	12.33	12.29	13.45
Total bargains (Est.)	21,568	23,297	25,993	24,740	20,001	21,302	22,433
Equity turnover £m.	—	243.72	276.79	372.12	277.45	242.69	243.13
Equity bargains	—	20,853	19,865	21,470	20,714	21,839	18,237
Shares traded (mln)	—	141.6	156.6	186.7	157.5	141.0	133.7

10 am 907.4. 11 am 906.1. Noon 905.1. 1 pm 904.6. 2 pm 903.8. 3 pm 905.5.

Basis 100 Govt. Secs. 15/10/26. Fixed Int. 1928. Industrial 1/7/35. Gold Mines 12/9/55. SE Activity 1974.

Latest Index 01-246 8026.

*Nil=11.49.

HIGHS AND LOWS

	1984 High	1984 Low	Since Compilat'n High	Since Compilat'n Low
Govt. Secs.	81.77 (9/1)	80.54 (8/5)	127.4 (9/1/35)	49.18 (3/1/75)
Fixed Int.	87.48 (14/5)	85.53 (8/5)	155.4 (28/11/47)	50.03 (3/1/75)
Ind. Ord.	922.8 (3/5)	770.3 (4/1)	922.8 (2/5/84)	49.4 (26/6/40)
Gold Mines	711.7 (8/5)	520.2 (17/1)	734.7 (15/2/83)	43.5 (26/10/71)

S.E. ACTIVITY

	May 4	May 3
—Daily Gilt Edged Bargains	170.5	141.7
Equities Bargains	131.2	128.7
Value	492.5	559.5
5-day Average Gilt Edged Bargains	144.4	154.1
Equities Bargains	134.6	138.9
Value	552.9	590.1

Britannia to buy fourth 767

BRITANNIA AIRWAYS, the UK independent airline which is part of the Thomson Travel group, is to buy a fourth Boeing 767 twin-engined jet airliner, costing about $40m (£29m), writes Michael Donne.

The aircraft will be delivered next spring with the airline's third 767 ordered some time ago. The two jets will be capable of long-range operations.

Britannia will help to pay for the aircraft by selling two of its fleet of 29 smaller Boeing 737 twin-engined jets.

Mr Derek Davison, chairman and chief executive of Britannia, said the decision to expand the 767 fleet was founded on the operational efficiency and passenger appeal of the aircraft "which have after only a few months of operation already proved themselves."

OPTIONS

First Dealings	Last Dealings	Last Declaration	For Settlement
May 8	May 18	Aug 9	Aug 20
May 21	June 8	Aug 30	Sept 10
June 11	June 22	Sept 13	Sept 24

For rate indications see end of Share Information Service

Stocks to attract money for the call included Lister and Co., Aran Energy, Brunswick Oil, Bristol Oil, Electronic Rentals, Sears, Marinex, Premier Consolidated, Bula, Wace Group, Eglinton, Dupont, Polly Peck, Bath and Portland, Rugby Portland and GEC.

ACTIVE STOCKS

Above average activity was noted in the following stocks yesterday.

Stock	Closing price	Day's change
British Home Stores	222	−12
BP	503	−12
Bryson Oil and Gas	52	−7
Costain	286	−6
De Beers Defd.	528	−14
Eglinton Oil and Gas	63	−5
Garnar Booth	148	+18
Grand Metropolitan	350	−4
Greenfields Leisure	48	+11½
ICI	612	+14
Redland	296	−7
Simon Eng.	473	−20

FRIDAY'S ACTIVE STOCKS

Based on bargains recorded in Stock Exchange Official List.

Stock	No. of changes	Fri. close	Day's change
Shell Transport	15	653	+8
Cable Wireless	13	350	+2
Unilever	12	990	+5
ICI	11	598	+8
Tricentrol	11	221	+4
Beazer (C. H.)	10	420	−10
Brit. Home Strs	10	234	−10
Hanson Trust	10	219	+5
Rgby Prtld Cmt	10	108	+5
A. B. Electronic	9	535	+25
Beecham	9	322	+4
Bsar McConnell	9	122	+4
BP	9	515	+2
GEC	9	183	−2

FT-ACTUARIES SHARE INDICES

These indices are the joint compilation of the Financial Times, the Institute of Actuaries and the Faculty of Actuaries

EQUITY GROUPS & SUB-SECTIONS (Figures in parentheses show number of stocks per section)	Tues May 8 1984: Index No.	Day's Change %	Est. Earnings Yield % (Max.)	Gross Div. Yield % (ACT at 30%)	Est. P/E Ratio (Net)	Fri May 4 Index No.	Thurs May 3 Index No.	Wed May 2 Index No.	Tues May 1 Index No.	Year ago (approx.) Index No.
1 CAPITAL GOODS (202)	529.47	−1.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2 Building Materials (24)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3 Contracting, Construction (32)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4 Electricals (14)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5 Electronics (27)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6 Mechanical Engineering (62)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8 Metals and Metal Forming (9)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9 Motors (17)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10 Other Industrial Materials (17)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21 CONSUMER GROUP (195)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22 Brewers and Distillers (23)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25 Food Manufacturing (22)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26 Food Retailing (12)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27 Health and Household Products (9)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29 Leisure (22)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
32 Newspapers, Publishing (14)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
33 Packaging and Paper (15)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
34 Stores (47)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
35 Textiles (20)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
36 Tobaccos (3)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
39 Other Consumer (9)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
41 OTHER GROUPS (88)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
42 Chemicals (18)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
44 Office Equipment (5)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
45 Shipping and Transport (14)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
46 Miscellaneous (51)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
49 INDUSTRIAL GROUP (485)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
51 Oils (15)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
59 500 SHARE INDEX	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
61 FINANCIAL GROUP (120)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
62 Banks (6)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
63 Discount Houses (7)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
65 Insurance (Life) (9)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
66 Insurance (Composite) (9)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
67 Insurance (Brokers) (6)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
68 Merchant Banks (12)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
69 Property (53)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
70 Other Financial (18)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
71 Investment Trusts (106)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
81 Mining Finance (4)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
91 Overseas Traders (16)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
99 ALL-SHARE INDEX (746)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

	Index No.	Day's Change	Day's High	Day's Low					
FT-SE 100 SHARE INDEX	1117.6	−16.4	1126.9	1115.9	1134.0	1141.6	1140.1	1136.8	—

FIXED INTEREST

PRICE INDICES	Tues May 8	Day's change %	Fri May 4	xd adj. today	xd adj. 1984 to date
British Government					
1 5 years	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2 5–15 years	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3 Over 15 years	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4 Irredeemables	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5 All stocks	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6 Debentures & Loans	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 Preference	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

AVERAGE GROSS REDEMPTION YIELDS	Tues May 8	Fri May 4	Year ago (approx.)
British Government			
1 Low 5 years	[illegible]	[illegible]	[illegible]
2 Coupons 15 years	[illegible]	[illegible]	[illegible]
3 25 years	[illegible]	[illegible]	[illegible]
4 Medium 5 years	[illegible]	[illegible]	[illegible]
5 Coupons 15 years	[illegible]	[illegible]	[illegible]
6 25 years	[illegible]	[illegible]	[illegible]
7 High 5 years	[illegible]	[illegible]	[illegible]
8 Coupons 15 years	[illegible]	[illegible]	[illegible]
9 25 years	[illegible]	[illegible]	[illegible]
10 Irredeemables	[illegible]	[illegible]	[illegible]
11 Debs & 5 years	[illegible]	[illegible]	[illegible]
12 Loans 15 years	[illegible]	[illegible]	[illegible]
13 25 years	[illegible]	[illegible]	[illegible]
14 Preference	[illegible]	[illegible]	[illegible]

†Flat yield. Highs and lows record, base dates, values and constituent changes are published in Saturday issues. A list of constituents is available from the Publishers, the Financial Times, Bracken House, Cannon Street, London, EC4P 4BY, price 15p, by post 28p.

EUROPEAN OPTIONS EXCHANGE

Series	May Vol.	May Last	Aug. Vol.	Aug. Last	Nov. Vol.	Nov. Last	Stock
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

TOTAL VOLUME IN CONTRACTS 19,231

A=Ask B=Bid C=Call P=Put

RECENT ISSUES

EQUITIES

Issue price p	Amount paid up	Latest Renunc. date	1984 High	1984 Low	Stock	Closing price p	+or–	Net Div.	Times Covered	Gross Yield	P/E Ratio
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

FIXED INTEREST STOCKS

Issue price £	Amount paid up	Latest Renunc. date	1984 High	1984 Low	Stock	Closing price £	+or–
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

"RIGHTS" OFFERS

Issue price p	Amount paid up	Latest Renunc. date	1984 High	1984 Low	Stock	Closing price p	+or–
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

NEW HIGHS AND LOWS FOR 1984

NEW HIGHS (54)

[illegible]

NEW LOWS (118)

[illegible]

RISES AND FALLS YESTERDAY

	Rises	Falls	Same
British Funds	2	93	10
Corpns. Dom. & Foreign Bonds	4	45	31
Industrials	157	521	731
Financial & Props.	60	221	279
Oils	15	65	60
Plantations	8	3	10
Mines	3	115	56
Others	70	80	89
Totals	299	1,102	1,259

LONDON TRADED OPTIONS

Option		CALLS July	CALLS Oct.	CALLS Jan.	PUTS July	PUTS Oct.	PUTS Jan.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

May 8 Total Contracts 4,745 Calls 2,786 Puts 1,959

*Underlying security price.

FT LONDON SHARE INFORMATION SERVICE

BRITISH FUNDS

1984 High	Low	Stock	Price £	+ or −	Yield Int.	Red.
"Shorts" (Lives up to Five Years)						
99¾	97⅛	Exch. 3pc 1984	99¾	......	3.02	9.08
101	100¼	Treas 12pc 1984	100⅝	−¼	11.91	9.70
105⅝	103¼	Treas. 15pc 1985	103¾	−⅛	14.46	9.81
[illegible]						

Five to Fifteen Years

[illegible]

Over Fifteen Years

[illegible]

Undated

[illegible]

Index-Linked

[illegible]

INT. BANK AND O'SEAS GOVT STERLING ISSUES

[illegible]

CORPORATION LOANS

[illegible]

COMMONWEALTH AND AFRICAN LOANS

[illegible]

LOANS

Building Societies

[illegible]

Public Board and Ind.

[illegible]

Financial

[illegible]

FOREIGN BONDS & RAILS

[illegible]

AMERICANS

1984 High	Low	Stock	Price £	+ or −	Div Gross	C'vr	Y'ld Gr's
34¼	26⅞	Abbott Labs.‖	31⅞	+⅛	$1.20	—	2.7
34¼	24½	Alcoa $1	25xd	+½	$1.20	—	3.4
18⅝	16¼	Amax $1	18xd	......	20c	—	0.8
14¼	852p	Amdahl 5c.	10¼	+½	20c	—	—
24⅛	19⅛	Amer. Express $0.60	22⅛	......	$1.28	—	4.1
19	14½	Amer Medical Int $1	18	−¼	48c	—	1.9
23⅞	20⅝	Amer. Nat. Res. $1	23	+⅛	h$1.41	—	9.7
11⅞	10⅝	American T. & T. $1	11⅞	+⅛	$1.20	—	7.1
47⅞	43⅛	Ameritech $1	47⅞	+⅜	$6.00	—	8.8
21½	17½	Amlac‖	19⅛	−⅛	$1.44	—	5.3
22p	16½p	AridTech	17p	+½p	—	—	—
16⅛	13	Bankamerica $1	14xd	−⅛	$1.52	—	7.7
35½	28	Bankers N.Y. $10	31⅞	+½	$2.45	—	5.5
54½	46¾	Bell Atlantic $1	50¼	......	$6.40	—	9.0
69	58½	BellSouth $1	66xd	+¼	$7.80	—	8.3
20⅞	15½	♥Beth Steel $8	17⅛	−¼	60c	—	2.5
31½	19⅞	Brown'g-Fer. 16⅔c	20⅞	+½	96c	—	3.2
22⅞	16⅝	Brunswick Corpn.‖	20	−¼	60c	—	2.1
28¼	24¼	CPC Intnl. 25c	26⅝	+⅛	$2.20	—	5.8
[illegible]							
42½	27¼	♥Shell Oil $1	41⅞	−⅛	♦$2.00	—	3.4
45⅞	38½	Southwestern Bell $1	42⅞	+½	$5.60	—	9.3
35⅞	25½	Sperry Corpn $0.50	23⅛	......	$1.92	—	4.8
41⅞	29⅞	Sun Co. Inc. $1	40	−⅛	$2.30	—	4.1
57⅞	42¼	TRW Inc. $1¼	47⅝xd	+1⅝	$2.80	—	4.1
31⅞	26⅛	Tenneco $5	29½xd	−1	$2.80	—	6.7
184	151	Do. 10% Ln.Stk. 91-5	178	−5	10%	—	5.7
31½	25	Texaco $6.25	28⅞	−¼	$3.00	—	7.3
32⅛	25⅝	Time Inc. $1	30½	+⅝	82c	—	1.9
21¾	15⅜	Transamerica $1	16¼	−⅛	$1.50	—	6.3
46	35⅞	Union Carbide $1	40½xd	−⅛	$3.40	—	5.9
52⅞	39⅞	Utd. Tech $5	47¼	+¾	$2.60	—	3.9
23¼	18¼	♥US Steel $1	21¼	−⅛	$1.00	—	3.3
45½	39	US West‖	43⅛	+¼	$5.40	—	8.8
26⅞	20½	♥Woolworths $3½	26	+1⅛	$1.80	—	4.9

CANADIANS

1984 High	Low	Stock	Price £	+ or −	Div Gross	C'vr	Y'ld Gr's
16⅛	13⅛	Bk. Montreal $2	13½xd	−⅛	$1.96	—	8.4
879p	622p	Bk. Nova Scot.‖	640p	−1	hb8c	—	6.2
110p	95p	Barrick Res Corp	100p	......	—	—	—
19⅛	16	Bell Canada ‖	17⅞	+⅛	$2.18	—	7.3
14¼	12⅝	♥Bow Valley‖	13¼	+⅛	15c	—	0.7
24	19⅝	Brascan‖	20½xd	......	$1.60	—	4.5
586p	350p	♥Breakwater Res.	515p	−25	—	—	—
17¾	13⅞	Can.Imp.Bk. $2	14¼	+⅛	$2.08	—	8.5
30⅜	23	Can.Pacific $5	24⅞	......	$1.40	—	3.3
36½	35	Do. 4pc Deb. £100	35½	......	4%	—	11.3
14½	10⅝	Can. P. Ent.‖	12⅛	......	80c	—	3.8
177p	130p	♥Greenwich Res Inc	130p	−5	—	—	—
10⅝	959p	♥Gulf Can.‖	10⅝	......	52c	—	—
10⅛	863p	♥Hawker Sid Can‖	946p	+45	96c	—	5.9
14¾	13⅛	♥Hollinger $5	13⅝	......	s$2.20	—	9.4
13⅞	11	Hudson's Bay ‖	11½	+⅛	60c	—	3.0
22¼	19⅞	♥Imperial Oil‖	22	+¼	$1.40	—	3.7
10¼	876p	Inco‖	876pxd	−25	$US20c	—	1.6
700p	520p	♥Intl. Corona Res	625p	−15	—	—	—
970p	775p	♥Inland Nat. Gas $1	800p	......	$1.10	—	8.0
428p	229p	Massey-Ferguson‖	234p	−3	8—	—	—
336p	130p	♥Pecos Res‖	280p	......	—	—	—
991	862p	♥Rio Algom	946p	+8	55c	—	—
20⅛	15⅝	Royal Bk. Can. ‖	15¼	+⅛	$2.00	—	7.8
26⅞	22⅞	Seagram‖	24⅞	−⅛	US$0.68	—	1.9
75p	60p	♥Talcorp.	65p	......	—	—	—
150p	120p	♥Do. Pref. $3	140p	......	10%	—	12.2
985p	787p	Toronto-Dom. Bk.‖	848p	−25	$0.76	—	5.2
909p	823p	♥Trans Can Pipe	827p	+2	♦$$1.92	—	13.5

BANKS, HP & LEASING

1984 High	Low	Stock	Price	+ or −	Div Net	C'vr	Y'ld Gr's	P/E
380	327	ANZ $A1	375	−3	Q28c	3.1	4.9	7.7
603	345	Alexanders D. £1	550	......	h20.0	—	5.2	—
£97¾	£83¼	Algemene Fl.100	£85½xd	+1¼	♦Q26%	♦	7.1	♦
178	150	Allied Irish	172	......	†Q49%	4.2	5.6	5.9
100	72	Ansbacher (H.) 50p	87	−5	†3.5	—	5.7	—
363	290	Bk. Ireland £1	353	......	†Q24.9	—	5.5	—
[illegible]								

Hire Purchase, Leasing, etc.

[illegible]

BEERS, WINES & SPIRITS

[illegible]

BEERS, WINES—Cont.

[illegible]

BUILDING INDUSTRY, TIMBER AND ROADS

[illegible]

CHEMICALS, PLASTICS

[illegible]

DRAPERY AND STORES

[illegible]

DRAPERY & STORES—Cont.

[illegible]

ELECTRICALS

[illegible]

ENGINEERING

[illegible]

ENGINEERING—Continued

[illegible]

FOOD, GROCERIES, ETC

[illegible]

HOTELS AND CATERERS

[illegible]

HOTELS—Continued

[illegible]

INDUSTRIALS (Miscel.)

[illegible]

INDUSTRIALS—Continued

INSURANCES

LEISURE

LEISURE—Continued

MOTORS, AIRCRAFT TRADES

Motors and Cycles

Commercial Vehicles

Components

Garages and Distributors

NEWSPAPERS, PUBLISHERS

PAPER, PRINTING ADVERTISING

PROPERTY

PROPERTY—Continued

SHIPPING

SHOES AND LEATHER

SOUTH AFRICANS

TEXTILES

TOBACCOS

TRUSTS, FINANCE, LAND

Investment Trusts

INVESTMENT TRUSTS—Cont.

Finance, Land, etc

OIL AND GAS

OIL AND GAS—Continued

OVERSEAS TRADERS

PLANTATIONS

Rubbers, Palm Oil

Teas

MINES

Central Rand

Eastern Rand

Far West Rand

O.F.S.

Finance

Diamond and Platinum

Central African

MINES—Continued

Australians

Tins

Miscellaneous

NOTES

REGIONAL & IRISH STOCKS

OPTIONS — 3-month call rates

"Recent Issues" and "Rights" Page 39

This service is available to every Company dealt in on Stock Exchanges throughout the United Kingdom for a fee of £700 per annum for each security.

AUTHORISED UNIT TRUSTS

FT UNIT TRUST INFORMATION SERVICE

Abbey Unit Tst. Mngrs. (a)
1-3 St Paul's Churchyard EC4P 4DX 01-236 1833

Britannia Gp of Unit Trusts Ltd (a) (c) (g)

Crown Unit Trust Services Ltd.

Gowett (John) Unit Mngt. Ltd.

Legal & General (Unit Tst., Mngrs.) Ltd.

Midland Bank Group U.T. Mngrs. Ltd.

Save & Prosper Group

Temple Bar Unit Trust Mgrs Ltd

[illegible]

INSURANCES

[illegible]

Insurances—continued

[illegible]

Capital Life Assurance				
Key Inv Fd	—	129.75	....	—
PcmkrInvFd	—	132.4	....	—
Equity Fd	134.61	141.70	....	—
FxdIntFd	111.72	117.60	....	—
Prop'ty Fd	114.47	120.49	....	—
Cash Fd	102.91	108.33	....	—
ManagdFd	130.58	137.45	....	—
Col Mut Life (Pension Annuities)				
ManCpA;B	117.81	124.02	....	—
ManInvA;B	119.00	125.27	....	—

Cash	97.7	102.9	+0.1	—
Continental Life Assurance PLC				
64 High St Croydon CR0 9XN 01-680 5225				
Equity Acc	194.0	204.3	....	—
Propty Acc	169.1	178.0	....	—
Int Acc	154.0	162.2	....	—
Managd Acc	178.6	188.1	....	—
Spec Sits	134.8	141.9	....	—
PenIntAcc	151.1	159.1	....	—
PenPrpAcc	189.4	199.4	....	—
PensEquity	231.5	243.7	....	—

Mixed Acc	111.5	117.5	−0.8	—
O'seasFdCp	112.7	118.7	−0.7	—
O'seasAcc	116.7	122.9	−0.7	—
PropertyCap	96.0	101.1	....	—
PropertyAcc	99.5	104.8	....	—
General Portfolio Life Ins Co Ltd				
Crossbrook St, Cheshunt, Herts. Waltham Cross 31971				
PrtfloFdInA	278.9	293.7	....	—
PrtfloEqCap	263.0	—	....	—

Offshore & Overseas—continued

[illegible]

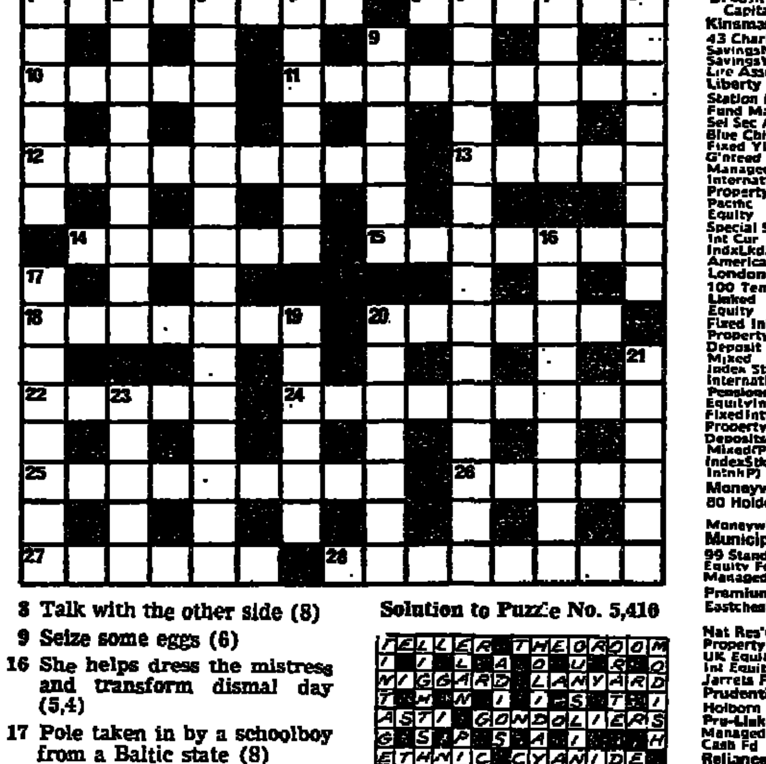
Money Market Trust Funds

[illegible]

Money Market Bank Accounts

[illegible]

F.T. CROSSWORD PUZZLE No. 5,411



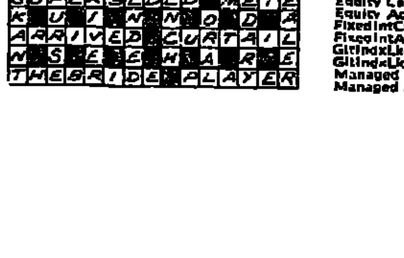
ACROSS

1 Habitual criminal makes for difficult police work (4,4)
5 Make a cat sit still (6)
10 A guru disposed to prognosticate (5)
11 Cop in male form (9)
12 How to convey strong emotion (9)
13 Make a run to clinch the match (5)
14 Sandwiches and drinks (6)
15 They rise in anger (7)
18 Observes the intrusion and is furious (7)
20 Intimate a gloomy return to the East (6)
22 A full round or a small portion? (5)
24 Out of gear? (9)
25 Breeding place for germs, perhaps (9)
26 Regional publication? (5)
27 A young crab? (6)
28 I'd return as an interloper (8)

DOWN

1 He has the skills to make a suit (6)
2 Fix up mum with a part? It's just empty talk (9)
3 Exposed as a dummy (5,2,3,5)
4 Takes down to a lower level? (7)
6 Persistent parking offender at the station (6,9)
7 Speed of agency typist with a circular letter (5)
8 Talk with the other side (8)
9 Seize some eggs (6)
16 She helps dress the mistress and transform dismal day (5,4)
17 Pole taken in by a schoolboy from a Baltic state (8)
19 Search on board for switches (6)
20 Bar and a club (7)
21 Newspaperman to be found in dire trouble (6)
23 Taxi turning up in East Lancashire (5)

Solution to Puzzle No. 5,410



هكذا من الأصل

INSURANCE & OVERSEAS MANAGED FUNDS

Lloyds Life Assurance—cont.
Gartmore Funds—Series A

American May 8	161.1	169.6	+1.6	—
Australian May 8	113.2	119.2	+0.4	—
British May 8	147.0	154.8	+1.6	—
Commodity May 8	136.7	143.9	-0.8	—
Extra Inc May 8	136.1	143.3	+0.7	—
Far Eastern May 8	129.5	136.4	-1.3	—
Gilt May 8	100.5	105.8	-1.3	—
Global Strat May 8	190.4	200.5	+0.7	—
Gold Share May 8	81.7	86.1	-4.3	—
High Inc May 8	139.6	147.0	+0.3	—
Income May 8	176.0	185.3	+1.7	—
Japan May 8	193.4	203.6	+2.5	—
Oil & Energy May 8	137.0	144.3	+0.9	—
Special Sits May 8	160.0	168.5	+1.6	—
UK Smlr Cos May 8	146.8	154.6	+1.1	—
Man Growth May 8	163.3	171.9	-0.6	—

London A'deen & Nthn. Mtl. Assur. Ltd.
129 Kingsway, London, WC2B 6NF. 01-404 0393

"Asset Builder"	70.1	74.3	...	—

London Indemnity & Gnl. Ins. Co. Ltd
18-20, The Forbury, Reading 583511.

Money Mngr May 1	67.9	72.7	...	—
MM Flexible May 8	59.5	62.8	...	—
Fixed Interest May 4	57.7	60.8	...	—

London Life Linked Assur. Ltd.
100, Temple St., Bristol, BS1 6EA. 0272-279179

Continued on adjacent Page

London & Manchester Group
Winslade Park, Exeter EX5 1DS. 0392 52155

	Cap	Acc		Rd NUC
Invest Trust Fd	324.9	351.7	-1.7	368.9
Property Fd	117.8	126.9	...	132.4
Fixed Int Fd	138.8	149.6	-0.7	—
Equity Fd	145.8	156.9	-1.8	—

Property Growth Assur. Co. Ltd.
Leon House, Croydon CR9 1LU. 01-680 0606

Property Fund		292.6		...	—
Property Fund (A)		284.0		...	—
Agricultural Fund		1,152.0		...	—
Agric. Fund (A)		1,119.9		...	—
Abbey Nat. Fund		234.2		...	—
Abbey Nat. Fd. (A)		233.0		...	—
Investment Fund		146.9		...	—
Investment Fund (A)		143.7		...	—
Equity Fund	468.4		—	-5.8	—
Equity Fund (A)	459.0		—	...	5.8
Money Fund		225.1		...	—
Money Fund (A)		220.7		...	—
Actuarial Fund		233.1		...	—
Gilt-edged Fund	194.4		—	...	—
Gilt-Edged Fd. (A)	193.9		—	-0.5	—
Retire Annuity		370.0		...	—
Immed. Ann'ty		194.5		...	—
International Fd.		271.3		-1.0	—
Bldg. Soc. Life Fd.		109.4		...	—

Property Growth Pensions & Annuities Ltd.

All Wther Ac. Uts.	276.4	291.0	...	—
Inv. Fd. Uts.		316.2	...	—
Pension Fd. Uts.		266.1	...	—
Conv. Pens. Fd.		313.4	...	—
Cnv. Pns. Cap. Ut.		230.0	...	—
Man. Pens. Fd.		375.0	...	—
Man. Pens. Cap. Ut.		297.0	...	—
Prop. Pens. Fd.		293.0	...	—
Prop.Pens.Cap.Uts.		217.7	...	—
Bldg. Soc. Pen. Ut.		271.6	...	—
Bldg. Soc. Cap. Ut.		203.5	...	—
Gilts Pens. Fd.		174.9	-0.6	—
Gilts Pens. Fd. Cap.		150.0	-0.6	—
Equity Pens. Fd.		296.0	-4.3	—
Equity Pens. Fd. Cap.		254.1	-3.8	—
Intl Pens Fd		107.6	-0.4	—
Intl Pens Fd Cap		106.1	-0.4	—

Providence Capital Life Assc. Co. Ltd.
30 Uxbridge Road, W12 8PG. 01-749 9111

Equity Acc.	120.1	126.7	+0.9	—

OFFSHORE AND OVERSEAS

WestAvon Secs (Guernsey) Ltd
Borough Hse, St Peter Port, Guernsey. 0481 27963

Gilt & Option Fd	£1.19	1.24	...	2.50
US $ Option	$0.86	0.91	...	—

World Wide Growth Management♦
10a, Boulevard Royal, Luxembourg

Worldwide Gth Fd	$12.65	-0.24	—

Inv. Adv.: M. & G. Inv. Mngt., Ltd., London.

Wren Commodity Management Ltd.
10, St. George's St., Douglas IoM 0624 25015

Wren Com. Fund	22.1	23.0	...	—
Chinese Fund	61.8	64.4	...	—
Precious Metal Fund	138.1	143.7	...	—
Vanguard Cmdy. Fd.	29.5	30.7	...	—
Financial Futures Fd.	64.3	67.0	...	—

NOTES

Prices are in pence unless otherwise indicated and those designated $ with no prefix refer to U.S. dollars. Yields % (shown in last column) allow for all buying expenses. a Offered prices include all expenses. b Today's prices. c Yield based on offer price. d Estimated. g Today's opening price. h Distribution free of UK taxes. p Periodic premium insurance plans. s Single premium insurance. x Offered price includes all expenses except agent's commission. y Offered price includes all expenses if bought through managers. Z Previous day's price. ¶ Guernsey gross. # Suspended. ♦ Yield before Jersey tax. † Ex-subdivision. ‡‡ Only available to charitable bodies. § Yield column shows annualised rate of NAV increase.

COMMODITIES AND AGRICULTURE

S. Africa sells milk powder to NZ

By Michael Holman in Johannesburg

IN THE first deal of its kind, South Africa has made the initial shipment of skimmed milk powder under a marketing agreement with the New Zealand Dairy Board worth between U.S.$3.5m-4m (£2.5m-£2.85m).

The South African Dairy Board said that 6,000 tons of skimmed milk powder would be marketed by the New Zealand body "to various destinations in the Far East."

The deal was "mutually beneficial." South Africa would be able to take advantage of New Zealand's dairy marketing expertise, while in return South Africa would not undercut prevailing world prices.

The Republic is not normally an exporter of dairy products, but two factors have created a surplus this year.

The country's severe drought *has forced owners of mixed* farms to shift from maize to dairy output, while imports of milk solids at subsidised prices in 1982 and 1983 reduced demand for the local products.

Negotiations with the New Zealand authorities began a months ago, and the first shipment left South Africa at the end of April.

No further details are available about the destination of the skimmed milk powder. Many countries in Africa and abroad ban trade links with the republic but conduct under-the-counter negotiations.

Dai Hayward writes from Wellington: Iran is to buy another 12,000 tonnes of New Zealand lamb—worth about $NZ25m (£11.68m).

Iran had already placed contracts for 152,000 tonnes of New Zealand lamb worth around NZ$400m.

Now it is to exercise its option for an extra 10 per cent of the 120,000 tonne contract placed last November.

Lower copper prices reflect New York losses

BY JOHN EDWARDS, COMMODITIES EDITOR

COPPER PRICES tumbled on the London Metal Exchange yesterday as traders returned from the Bank Holiday in a gloomy mood.

The scene was set by the New York market, which fell sharply on Monday while London was closed, reflecting the rise in U.S. interest rates, the easier trend in gold, and an apparent lack of consumer demand.

Duval Copper lowered its U.S. selling price by 1 cent to 70 *cents a pound, while Comex* values dropped to 62.10 cents for May delivery.

The decline accelerated following news that copper stocks in the LME warehouses fell last week by only 2,000 tonnes to 270,875 tonnes when a much larger decline had been forecast.

Some panic stop-loss selling was triggered off, driving the market down until trade buying interest emerged at the lower levels.

Three months higher grade copper closed near the low of the day £32 down at £1,020.75 a tonne before recovering in after-hours dealings to £1,025. The cash price closed £33 lower at £1,005.

Lead was unsettled by the trend in copper and gold, resulting in heavy speculative selling. The cash price lost £10.25 to £320.5 a tonne, in spite of stocks held in the LME warehouses dropping by 9,875 tonnes to 98,600 tonnes—the lowest level since June 1982.

The market also ignored news that the Port Pirie smelter in Australia, which produces the bulk of the country's lead ex*ports, was beginning to shut* down following the failure to end the dispute which has kept the Broken Hill mining complex closed since March 29.

Talks are continuing to settle the dispute, but the smelter, which also produces zinc and silver, is being forced to close down by a shortage of ore concentrates for processing.

Aluminium prices resisted the downward selling pressure, following a larger than expected fall in stocks, down by 12,800 to 166,025 tonnes. Zinc values too were held steady by a reported shortage of immediately available supplies that sustained the cash price, in spite of warehouse stocks declining by only 275 to 46,075 tonnes.

Tin prices rose to the highest levels for 13 months as further support buying by the buffer stock tried to narrow the widening gap between London and Penang created by the *weakness of sterling against the* Malaysian dollar.

The uptrend was encouraged by tin stocks falling by 665 to 28,530 tonnes.

Nickel stocks declined by 1,056 to 30,408 tonnes and LME silver holdings by 320,000 to 50,534,000 ounces.

● Workers at Falconbridge Mines in Sudbury, Ontario, voted by a 58 per cent margin to accept a new wage agreement negotiated by union representatives last week.

Earlier, it was feared the workers might reject the terms of the proposed labour contracts, which would almost certainly have resulted in a strike.

Meanwhile, in Indonesia, a World Bank report said that *prospects for Indonesia's nickel* exports appear more encouraging than a year ago. The report, according to Reuter, said exports of nickel matte by *Indonesia are expected to in*crease to 29,000 tonnes in 1989/90 compared with some 19,000 tonnes in 1983/84. Ferronickel shipments are expected to continue *around 5,000 tonnes a* year.

Growing fear of cocoa crop losses

THE DROUGHT damage *suffered* by Brazil's *temporao* cocoa crop is causing increasing concern among product manufacturers in Bahia. While the extent of crop losses remains unknown, some grinders have had to turn down sales to importers, a correspondent reports from Sao Paulo.

Local estimates of the temporao crop, harvested between May and September, range from 1.5m to 2.2m bags (60 kilos each). Under favourable weather conditions, Bahia's mid-crop can be 3m bags or more.

The crop was hit by an extended period of drought from January to the end of February, which resulted in particularly poor pod-setting during March. Conditions have since improved, but any flowering and pod-setting from April onwards is likely to be reflected only in the output of the main crop, beginning in October.

Joanes Industrial, the Salvador-based grinder, is working on the basis of a temporao crop of 1.8m bags. But if anything, according to Mr J. Reesink, the vice-president, output is likely to be somewhat less than this figure, for there is still a possibility that the crop *may suffer from podrot.*

"For the time being we have practically stopped selling," Mr Reesink said. "We can't make deals with importers when we're *not sure if we'll see the cocoa.*"

The extent of crop losses may not yet be fully appreciated outside Brazil, Mr Reesink feels. But the prospective shortfall in supplies is reflected in domestic prices, which currently stand some 20 to 25 per cent above world prices.

"After what happened last *year, perhaps people feel we are crying wolf,*" Mr Reesink said.

In 1983 the temporao crop suffered a long period of drought, but recovered well in its later stages under the impact of plentiful rain and warm weather. Though the crop was late, it eventually produced about 3.1m bags.

The occurrence of drought during two consecutive years is almost unprecedented where the Bahian temporao crop is concerned, and grinders would rather it had not happened.

Mr Robert Salem, the sales manager of another leading product exporter in Salvador, Barreto de Araujo, says: "*Demand is strong at the moment,* coming mainly from small to medium size chocolate manufacturers who don't seem to be very well covered."

Mr Salem does not see much advantage if reduced temporao supplies lead to a price boom. "If prices shoot up, manufacturers will simply stop buying," he said.

The crop uncertainty is making it difficult to predict Brazil's sales prospects for this year, according to Sr Humberto Salomao Mafuz, head of the Cocoa Producers' Consultative Council, sales of beans and products are likely to total some 300,000 tonnes, compared with 340,000 in 1983.

Reports of surplus denied

REPORTS FROM consumer countries of a world cocoa surplus were strongly denounced in Abidjan at the opening session of a two-day meeting of cocoa producers.

The meeting was called jointly by the Ivory Coast and Ghana last week to fix a joint position regarding the renegotiation of the 4th International Cocoa Agreement.

Sugar market sticks with bearish tone

WORLD SUGAR prices slipped to 12-month lows yesterday as the established bearish tone of the market was *given further* encouragement by the weakness of precious metals prices.

In the morning, the London daily raws price was fixed £2.50 lower at £105.50 a tonne and on the London futures market the October quotation fell $7 to $164.30 a tonne.

Heavy oversupply on the world market has kept sugar prices low for some time while the International Sugar Agreement has been completely ineffective in its principal aim of supporting prices.

New talks on negotiating an improved agreement are to be held in Geneva in June, but analysts are not optimistic that an effective accord will result.

The depressed mood of the market has been characterised by its reluctance to respond to what little bullish news comes along. This was illustrated again yesterday when Morocco's announcement of a buying tender for one cargo of raw sugar produced no discernible impact.

New soyabean meal futures contract opens

By John Edwards

TRADING in the new 20 tonnes soyabean meal futures contract began yesterday. At the moment the smaller size lots will be confined to the distant months, commencing February 1985, while the existing 100 tonnes contract is phased out at the close of the December 1984 delivery month.

It is hoped that the introduction of the smaller size contract will increase speculative interest in the market and make it more flexible for the trade.

It is also planned to move the soyameal futures market on July 1 from the London Corn Exchange building to new premises on the Baltic Exchange alongside other domestic European agricultural markets such as grain, potatoes and the new pigmeat futures contract.

Turnover on the London soyameal futures contract dropped last month to a low ebb of only 1,383 lots (of 100 tonnes) compared with 2,187 lots in April 1984. Yesterday turnover was 223 lots, of which 120 were in the 20 tonnes contracts

Agreement on rubber to be discussed

KUALA LUMPUR—Representatives *of the* International Natural Rubber Organisation (Inro) council will meet from May 16-18 to decide whether the International Natural Rubber Agreement *should* be renegotiated.

The five-year agreement, which came into force in October 1980, expires next year. Its main functions are to maintain international rubber price stability through a buffer stock mechanism, and to ensure a balance between world rubber supply and demand. (Reuter)

● A RECORD UK wheat crop is possible this year. Estimates based on 1983 yields would *give a crop of 12.14m tonnes.* A Home Grown Cereals Authortiy survey shows that the acreage planted in wheat *is* 12 per cent higher than last year.

● A *MOSCOW* newspaper says the long dry spell which has led to low soil moisture levels in the European Soviet Union is expected to continue through *May and June. Fire services are* being put on alert

● MR JOHN TREAT, president of the New York Mercantile Exchange, has resigned to be*come a partner with* Bear Stearns and Co.

● APRIL VOLUME at the Chicago Board of Trade rose 29.6 per cent to 5,783,917 contracts from 4,462,138 in previous April.

● ARGENTINE meat exports in January-April this year totalled 82,829 tonnes, down from 125,060 in the same period last year, according to National Meat Board statistics.

● LOW RAINFALL in Northern China could cut the country's wheat crop this year by about 3m tonnes to 78m tonnes, foreign analysts say.

● TEA PRICES were a little firmer at yesterday's weekly London auction. The average price for quality tea was 8p up from last week at 300p a kilo; medium grade was down 2p at 254p; and low medium was up 5p at 235p.

Weakness of sterling encourages coffee high

By Richard Mooney

COFFEE PRICES on the London futaures market rose to the highest level for six and a half years yesterday encouraged by *overnight gains* in New York and the weakness of sterling against the dollar.

The New York rise had indicated a £10 advance for nearby London prices but with *sterling* drifting to a record low in dollar terms this was quickly exceeded. By the close the July position had reached £2,166 a tonne, up *£35.50 on the day.*

The coffee market's recent uptrend has been sustained rather than dramatic with the July quotation taking a month *to rise £140 a tonne.*

A continuing influence has been the shortage of supplies available for nearby delivery but a further boost was given *late last month when estimates* for the coming Brazilian crop were cut sharply.

The occasional bouts *of* selling have become increasingly *tentative, possibly reflecting* speculators' awareness of the approach of the Brazilian frost season.

● Participants at a weekend *meeting of South and Central* American coffee producers discussed the concept of a floor price on experts to *non-members* of the International Coffee Organisation (ICO), reports Reuter.

No conclusive agreement emerged from the meeting in Honduras and few *details* of the proposals were available, but producers agreed to study the idea in preparation for discussions about the problem of non-member sales at ICO meetings in London this September, New York brokers said.

Representatives from Brazil, Colombia and several other producing countries discussed floor price ranges of $1.15-1.20 a pound and $1.20-1.25. Non-member countries can currently buy coffee for about 75-80 cents against an ICO indicator level of about $1.44 a pound.

PRICE CHANGES

BRITISH COMMODITY PRICES

BASE METALS

ALUMINIUM

COPPER

NICKEL

SILVER

TIN

LEAD

ZINC

WOOL FUTURES

GRAINS

SUGAR

PIGMEAT

POTATOES

RUBBER

COCOA

COFFEE

SOYABEAN MEAL

COTTON

JUTE

TEA AUCTIONS

MEAT/FISH

INDICES

FINANCIAL TIMES

REUTERS

MOODY'S

DOW JONES

LONDON OIL

SPOT PRICES

GAS OIL FUTURES

GOLD MARKETS

LONDON FUTURES

EUROPEAN MARKETS

AMERICAN MARKETS

NEW YORK, May 8

NEW YORK

CHICAGO

CURRENCIES, MONEY and CAPITAL MARKETS

FOREIGN EXCHANGES

Sterling touches record low

The pound fell to its lowest level ever against the dollar in currency markets yesterday as U.S. interest rates continued to firm. U.S. prime rates were increased yesterday to 12½ per cent from 12 per cent and Eurodollar rates were about ¼ of a point higher. Sterling may have been firmer against the dollar had UK base rates been increased but UK money supply figures were a little better than expected and clearing banks abstained for the time being from making any announcement.

The pound registered useful gains against many European currencies however and its trade weighted index was relatively stable after a weaker start. The dollar continued to improve against a background of increased concern over rising U.S. interest rates. The market was worried about the recent Federal refunding programme and signs that U.S. economic indicators may soon show signs of a further acceleration in U.S. economic growth. On Bank of England figures, the dollar's index rose to 131.7 from 129.6, its highest level since late January.

STERLING — Trading range against the dollar in 1984 is 1.4940 to 1.3835. April average 1.4226. Trade weighted index 80.0 against 80.3 at noon and 80.1 in the morning and compared with 80.5 on Friday and 84.1 six months ago.

Sterling touched an all time trading low in London of $1.3775 against the dollar, having opened at $1.3855. It closed at $1.3830-1.3840, a fall of 2.6c from Friday's close in London. Against the D-mark it rose to DM 3.85 from DM 3.8375 and FFr 11.80 compared with FFr 11.77. It was weaker against the Swiss franc at SwFr 3.1175 from SwFr 3.1725 and Y317 from Y320.

D-MARK — Trading range against the dollar in 1984 is 2.8425 to 2.5535. April average 2.6435. Trade-weighted index 124.0 against 125.6 six months ago.

The Bundesbank intervened at the Frankfurt fixing to sell $50m as the D-mark fell sharply against the dollar. The U.S. currency rose to DM 2.7812 from DM 2.7540, during the heaviest intervention session since January 9, when the German central bank sold $61.9m. The fixing level was the highest for the dollar since February 1 as the dollar advanced on expectations of higher U.S. interest rates following comments by Dr Kaufman of Salomon Brothers on Friday, and fears of industrial unrest in Germany as the market awaits the strike vote by engineering workers. Sterling rose to DM 3.8610 from DM 3.8430, and the Swiss franc to DM 1.2176 from DM 1.2134. Within the EMS the Dutch guilder fell to DM 88.90 per 100 guilders from DM 89.005, while the French franc was unchanged at DM 32.600 per 100 francs.

ITALIAN LIRA — Trading range against the dollar in 1984 is 1,726.75 to 1,591.8. April average 1,635.90. Trade-weighted index 47.9 against 49.5 six months ago.

The lira fell to its lowest level for 3½ months against the dollar at yesterday's Milan fixing, while the D-mark showed little change and was fixed at L618, compared with L618.09 on Monday. The Bank of Italy bought $23.5m of the $60m traded officially when the dollar rose to L1,717.60 from L1,700. The central bank did not intervene against the D-mark. Sterling rose to L2,380.50 from L2,372.30, and the Swiss franc to L750.65 from L749.25. Within the EMS the French franc fell to L201.34 from L201.58;

£ in New York (latest)

	May 8	Prev. close
Spot	$1.3855-3865	$1.3830-3840
1 month	0.25-0.27 dis	0.23-0.25 dis
3 months	0.75-0.78 dis	0.70-0.73 dis
12 months	3.25-3.30 dis	3.11-3.16 dis

£ forward rates are quoted in U.S. cents discount.

EMS EUROPEAN CURRENCY UNIT RATES

	ECU central rates	Currency amounts against ECU May 8	% change from central rate	% change adjusted for divergence	Divergence limit %
Belgian Franc	44.9008	45.5710	+1.49	+1.43	±1.5447
Danish Krone	8.14104	8.19842	+0.70	+0.64	±1.6425
German D-Mark	2.24184	2.24544	+0.16	+0.10	±1.0842
French Franc	6.87456	6.88774	+0.19	+0.13	±1.4052
Dutch Guilder	2.52595	2.52524	−0.11	−0.17	±1.4964
Irish Punt	0.72569	0.73049	+0.66	+0.60	±1.6699
Italian Lira	1403.49	1385.99	−1.25	−1.25	±4.1505

Changes are for ECU, therefore positive change denotes a weak currency. Adjustment calculated by Financial Times.

THE POUND SPOT AND FORWARD

May 8	Day's spread	Close	One month	% p.a.	Three months	% p.a.
U.S.	1.3775-1.3900	1.3830-1.3840	0.23-0.28c dis	−2.21	0.73-0.78dis	−2.18
Canada	1.7885-1.7985	1.7920-1.7930	0.25-0.33c dis	−1.97	0.89-0.99dis	−2.07
Nethlnd.	4.31-4.34½	4.32-4.33	1⅞-1⅝c pm	5.01	3⅞-3⅝ pm	3.24
Belgium	77.85-78.45	78.15-78.25	17-22c dis	−2.99	49-59 dis	−2.76
Denmark	14.00-14.10	14.04-14.05	1⅝-2⅛ore dis	−1.87	4-5 dis	−1.42
Ireland	1.2670-1.2679	1.2685-1.2695	0.32-0.40p dis	−3.46	0.80-1.03dis	−3.09
W. Ger.	3.83½-3.87½	3.85½-3.86½	1⅞-1⅝pf pm	5.26	4¾-3⅝ pm	3.51
Portugal	192.00-194.50	192.00-193.50	80-260c dis	−10.87	250-650 dis	−9.52
Spain	214.75-216.25	215.20-215.40	140-160c dis	−8.36	410-435 dis	−7.85
Italy	2,365-2,387	2,372-2,375	11-14 lire dis	−6.32	35-38 dis	−6.15
Norway	10.61-10.69	10.64-10.65	4⅛-4⅝ore dis	−4.61	10⅞-11⅛ dis	−4.01
France	11.76-11.85	11.79½-11.80½	3-3⅝c dis	−3.45	9⅞-10⅝ dis	−3.41
Sweden	11.21-11.26½	11.24-11.25	⅜-⅞ore dis	−1.07	2⅜-2⅞ dis	−0.91
Japan	316-319	316½-317½	0.89-0.79y pm	3.14	2.58-2.48 pm	3.19
Austria	26.99-27.20	27.05-27.10	6⅞-8⅝gro pm	3.55	20-16⅝ pm	2.55
Switz.	3.15-3.18	3.15¼-3.16¼	1⅞-1⅝c pm	5.94	4⅞-4⅝ pm	5.46

Belgian rate is for convertible francs. Financial franc 79.40-79.50. Six-month forward dollar 1.58-1.61c dis, 12-month 3.20-3.30c dis.

THE DOLLAR SPOT AND FORWARD

May 8	Day's spread	Close	One month	% p.a.	Three months	% p.a.
UK†	1.3775-1.3900	1.3830-1.3840	0.23-0.28c dis	−2.21	0.73-0.78dis	−2.18
Ireland†	1.0840-1.1070	1.0850-1.0870	0.13-0.09c pm	1.19	0.27-0.17 pm	0.80
Canada	1.2940-1.2965	1.2960-1.2965	0.02c pm-par	0.09	0.03-0.01 pm	0.06
Nethlnd.	3.1200-3.1395	3.1240-3.1260	1.55-1.45c pm	5.75	3.82-3.67 pm	4.98
Belgium	56.38-56.65	56.52-56.56	2-4c dis	−0.58	5-8 dis	−0.46
Denmark	10.13¼-10.16½	10.15-10.15½	0.85-0.35ore pm	0.71	3.75-3.25 pm	1.38
W. Ger.	2.7710-2.7875	2.7815-2.7825	1.37-1.33pf pm	5.82	3.95-3.90 pm	5.63
Portugal	139.50-140.30	139.50-140.00	40-160c dis	−8.59	180-540dis	−10.02
Spain	155.40-155.75	155.45-155.55	75-85c dis	−6.17	220-250 dis	−6.04
Italy	1,714-1,719	1,716-1,717	7-8 lire dis	−4.02	15¾-16¾ dis	−3.78
Norway	7.6360-7.6490	7.6375-7.6425	1.40-1.90ore dis	−2.52	2.30-3.80dis	−1.81
France	8.4850-8.5425	8.5300-8.5350	0.85-1.05c dis	−1.33	2.40-2.90dis	−1.24
Sweden	8.1150-8.1325	8.1275-8.1325	1.00-0.50ore pm	1.11	2.85-2.35 pm	1.28
Japan	228.60-229.30	228.95-229.05	1.10-1.00y pm	5.50	3.10-3.00 pm	5.32
Austria	19.50-19.58	19.51½-19.52½	8-7gro pm	4.76	24-22 pm	4.71
Switz.	2.2775-2.2895	2.2805-2.2815	1.61-1.56c pm	8.32	4.37-4.32 pm	7.60

† UK and Ireland are quoted in U.S. currency. Forward premiums and discounts apply to the U.S. dollar and not to the individual currency. Belgian rate is for convertible francs. Financial franc 57.40-57.45.

OTHER CURRENCIES

May 8	£	$		£ Note Rates
Argentina Peso	53.60-53.69	38.80-38.83	Austria	27.00-27.30
Australia Dollar	1.5150-1.5170	1.0950-1.0966	Belgium	79.25-80.05
Brazil Cruzeiro	2,021.7-2,032.6	1,466-1,472	Denmark	14.03-14.17
Finland Markka	8.0740-8.0960	5.8320-5.8480	France	11.79-11.91
Greek Drachma	150.70-151.10	108.90-109.20	Germany	3.84½-3.88½
Hong Kong Dollar	10.78¼-10.79¼	7.8160-7.8180	Italy	2350-2395
Iran Rial	122.50*	87.40*	Japan	315-320
Kuwait Dinar (KD)	0.4070-0.4075	0.2949-0.2950	Netherlands	4.33-4.36
Luxembourg Fr.	78.15-78.25	56.52-56.54	Norway	10.63-10.74
Malaysia Dollar	3.1690-3.1750	2.2960-2.2975	Portugal	190-199
New Zealand Dlr.	2.1270-2.1330	1.5385-1.5407	Spain	208½-218
Saudi Arab. Riyal	4.8600-4.8650	3.5200-3.5215	Sweden	11.21-11.31
Singapore Dollar	2.9930-2.9990	2.0965-2.0980	Switzerland	3.15¼-3.19¼
Sth African Rand	1.7645-1.7670	1.2755-1.2770	United States	1.37¾-1.39¼
U.A.E. Dirham	5.0660-5.0740	3.6720-3.6730	Yugoslavia	188-198

* Selling rates.

CURRENCY MOVEMENTS

May 8	Bank of England Index	Morgan Guaranty Changes %
Sterling	80.0	−10.6
U.S. dollar	131.7	+19.8
Canadian dollar	88.9	−3.3
Austrian schilling	114.4	+3.5
Belgian franc	89.6	−11.5
Danish kroner	77.6	−9.7
Deutsche mark	124.0	+7.3
Swiss franc	145.9	+11.2
Guilder	114.0	+4.2
French franc	65.6	−15.8
Lira	47.9	−15.6
Yen	160.6	+15.7

Morgan Guaranty changes: average 1980-82=100. Bank of England Index (base average 1975=100).

CURRENCY RATES

May 8	Bank rate %	Special Drawing Rights	European Currency Unit
Sterling	—	0.748462	0.588030
U.S. $	9	1.03924	0.807567
Canadian $	11.13	1.34…	1.04596
Austria Sch.	4¾	20.2995	15.7879
Belgian Fr.	11	58.5455	45.5710
Danish Kr.	7	10.5504	8.19842
D'mark	4	2.89033	2.24544
Guilder	5	N/A	2.52524
French Fr.	9½	8.85774	6.88774
Lira	16	1765.11	1385.99
Yen	5	238.090	184.812
Norwgn Kr.	8	8.15180	6.32850
Spanish Pta.	—	161.620	125.682
Swedish Kr.	8½	8.45503	6.56058
Swiss Fr.	4	2.37331	1.84448
Greek Dr'ch.	20½	113.371	90.1056

* CS/SDR rate for May 4: 1.35484.

EXCHANGE CROSS RATES

May 8	Pound St'rling	U.S. Dollar	Deutsche m'k	JapaneseYen	FrenchFranc	Swiss Franc	Dutch Guild	Italian Lira	Canada Dollar	Belgian Franc
Pound Sterling	1.	1.384	3.850	317.0	11.80	3.158	4.325	2374.	1.793	78.20
U.S. Dollar	0.723	1.	2.782	229.0	8.533	2.281	3.125	1717.	1.296	56.53
Deutschemark	0.260	0.359	1.	82.34	3.065	0.820	1.123	616.6	0.466	20.31
Japanese Yen 1,000	3.155	4.364	12.15	1000.	37.22	9.961	13.64	7489.	5.655	246.7
French Franc 10	0.847	1.172	3.263	268.6	10.	2.676	3.665	2012.	1.519	66.27
Swiss Franc	0.317	0.438	1.219	100.4	3.737	1.	1.370	751.9	0.568	24.77
Dutch Guilder	0.231	0.320	0.890	73.29	2.728	0.730	1.	548.9	0.414	18.08
Italian Lira 1,000	0.421	0.583	1.622	133.5	4.971	1.330	1.822	1000.	0.755	32.94
Canadian Dollar	0.558	0.772	2.148	176.8	6.583	1.762	2.413	1324.	1.	43.63
Belgian Franc 100	1.279	1.769	4.923	405.4	15.09	4.038	5.531	3036.	2.292	100.

EURO-CURRENCY INTEREST RATES (Market closing rates)

May 8	Sterling	U.S. Dollar	Canadian Dollar	Dutch Guilder	Swiss Franc	D-mark	French Franc	Italian Lira	Belgian Franc Conv.	Belgian Franc Fin.	Yen	Danish Kroner
Short term	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 days' notice	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Month	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Three months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Six months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
One year	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Asian $ (closing rates in Singapore): Short-term 10⅝-10¾ per cent; seven days 10⅝-10¾ per cent; one month 10⅞-11 per cent; three months 11⅛-11¼ per cent; six months 11⅝-11¾ per cent; one year 12⅛-12¼ per cent. Long-term Eurodollars two years 12¾-12⅞ per cent; three years 13⅛-13¼ per cent; four years 13⅜-13½ per cent; five years 13⅝-13¾ per cent nominal closing rates. Short-term rates are call for U.S. dollars and Japanese yen; others two days' notice.

MONEY MARKETS

No change so far in UK base rates

There was no move by UK clearing banks yesterday to increase their base rates, following better-than-expected UK money supply figures. The situation became rather confused. Had money supply figures been as bad as expected there may have been an early announcement on base rates but although not exactly encouraging, the rise in M3 was less than expected. In addition the Bank of England made no change in its intervention rates even though some houses probably pushed for a lower price when the Bank took out the day's shortage.

UK clearing banks' base lending rate 8½-8¾ per cent (since March 15 and 16)

Despite this the market was naturally anxious on the one hand with sterling touching record lows against the dollar and U.S. prime rates climbing to 12½ per cent. On the other hand, sterling's trade-weighted index was relatively steady after a weaker start and the pound was quite strong against many European currencies. Against this background interest rates were marked sharply firmer in the morning but eased a little in the afternoon to finish below the day's highs but up from last Friday.

Three-month interbank money was quoted at 9⅛-9¼ per cent up from 9⅛-9⅛ per cent while three-month eligible bank bills were bid at 9⅛-9⅛ per cent, compared with 8⅞ per cent.

The forecast was later revised to a shortage of around £500m and the Bank gave assistance in the morning of £374m. This comprised purchases of £244m of eligible bank bills in band 2 (15-33 days) at 8¾ per cent and £38m in band 3 (34-63 days) at 8⅝ per cent. In band 4 (64-91 days) it bought £87m of Treasury bills and £5m of local authority bills all at 8⅝ per cent.

Once again the forecast was revised to a shortage of £550m before taking into account the morning's help and the Bank gave additional assistance of £208m in the afternoon. This comprised purchases of £11m of eligible bank bills in band 3 at 8⅝ per cent and in band 4 £197m at 8⅝ per cent. It also provided late assistance of £30m, making a total of £612m.

Overnight interbank money opened at 8-8½ per cent and eased to 6 per cent before coming back to 7½ per cent. Rates fell away to finish at 2 per cent. Short term rates remained easy with discount houses happy to part with paper, facing the prospect of a hike in dealing rates.

The Bank of England forecast a shortage of around £350m with factors affecting the market including maturing assistance and a take up of Treasury bills £115m. On the other hand there was a fall in the note circulation of £200m.

MONEY RATES

May 8	Frankfurt	Paris	Zurich	Amst'dam	Tokyo	Milan	Brussels	Dublin
Overnight	5.50-5.55	12⅞	2-3	5⅜-5⅝	5.65625	16½-16⅞	7.00	12-12¼
One month	5.70-5.80	12⅛-12¼	3⅝-3⅞	5⅞-5⅞	6.09375	16½-16⅞	11⅝-11⅞	12⅝-12⅝
Two months	5.75-5.85	12⅞-12⅞	—	—	—		—	12⅛-12¾
Three months	5.95-5.95	12¼-12⅜	3⅞-4	5⅞-6⅛	6.21875	16¾-17⅛	11⅝-11⅞	12⅝-12⅞
Six months	5.95-6.10	12⅜-12½	—	6⅛-6⅜	—	—	11⅝-11⅞	12¾-13
Lombard	5.5	—	—	—	—	—	—	—
Intervention	—	12	—	5⅞	—	—	—	—

LONDON MONEY RATES — Discount Houses Deposit and Bill Rates

May 8 1984	Sterling Certificate of deposit	Interbank	Local Authority deposits	Company Deposits	Market Deposits	Treasury (Buy)	Treasury (Sell)	Eligible Bank (Buy)	Eligible Bank (Sell)	Fine Trade (Buy)
Overnight	—	2-8¼	6½-8	5-8	4-8	—	—	—	—	—
2 days notice	—	—	8½-8⅝	—	—	—	—	—	—	—
7 days or	—	—	—	—	—	—	—	—	—	—
7 day notice	—	8 8⅝	8½-8¾	8½-8⅞	8-8⅝	—	—	—	—	—
One month	9⅛ 8⅞	8⅞-9⅛	9	9⅜	8½-8⅝	9⅛	9⅛	9⅛-9⅛	9-9⅛	9½
Two months	9⅛-9	9⅛-9⅛	9⅛	9⅝	8½-8¾	9⅛	9⅛	9⅛-9⅛	9-9⅛	9½
Three months	9⅛-9⅛	9⅛ 8½	9⅜	9¼	8½-9	9¼	9⅛	9⅛-9¼	9-9⅛	9⅞
Six months	9⅞-9¼	9⅛-9⅞	9⅝	—	—	—	—	9⅝	9⅛-9¼	10
Nine months	9⅜ 9⅜	9¾-10	9⅛	—	—	—	—	—	—	—
One year	9⅝-9⅞	9⅞-10⅛	10	—	—	—	—	—	—	—

	Local Auth. negotiable bonds	Local Authority Deposits	Finance House Deposits	$ Cert of Deposits	SDR Linked Deposits	ECU Linked Deposits
One month	9⅛-9⅛	—	9	10.85-10.95	9⅛-9⅜	8⅞-9⅛
Two months	9⅝-9¼	—	9¼	11.0-11.1	9⅛-9⅛	9-9⅛
Three months	9¾-9⅝	—	9½	11.2-11.3	9⅛-9⅛	9⅛-9⅛
Six months	9¾-9⅝	—	9⅞	11.65-11.75	9⅞-10⅛	9½-9⅛
Nine months	10⅛-9¾	—	10	11.9-12.1		—
One year	10⅛-9¾	—	10⅛	12.15 12.35	10⅛-10⅛	10-10⅛
Two years	—	10⅛	—	—	—	—
Three years	—	10¾	—	—	—	—
Four years	—	11	—	—	—	—
Five years	—	11	—	—	—	—

ECGD Fixed Rate Export Finance Scheme IV. Average Rate of interest period April 4 to May 1 1984 (inclusive): 8.834 per cent. Local authorities and finance houses seven days notice, others seven days' fixed. Finance Houses Base Rate (published by the Finance Houses Association): 9 per cent from May, 1984. London and Scottish Clearing Bank Rates for lending 8½-8¾ per cent. London Deposit Rate for sums at seven days' notice 5⅛-5⅞ per cent. Treasury Bills: Average tender rates of discount 8.5426 per cent. Certificates of Tax Deposit (Series 6). Deposit of £100,000 and over held under one month 8¾ per cent; one-three months 9 per cent; three-six months 9¼ per cent; six-nine months 9½ per cent; nine-12 months 9¾ per cent. Under £100,000 8½ per cent from May 3. Deposits held under Series 4-5 9½ per cent. The rate for all deposits withdrawn for cash 7 per cent.

MONEY RATES

NEW YORK (Lunchtime)

Prime rate	12-12½
Broker loan rate	11½-12
Fed funds	11⅛
Fed funds at intervention	11¼

Treasury Bills

One month	9.30
Two month	9.50
Three month	10.08
Six month	10.32
One year	10.44

Treasury Bonds

Two year	99½
Three year	96²¹⁄₃₂
Four year	97¾
Five year	95²⁷⁄₃₂
Seven year	96²³⁄₃₂
10 year	92²³⁄₃₂
30 year	91¹⁵⁄₃₂

FT LONDON INTERBANK FIXING

LONDON INTERBANK FIXING (11.00 a.m. May 8)

3 months U.S. dollars	
bid 11 7/16	offer 11 9/16

6 months U.S. dollars	
bid 11 5/16	offer 11 1/16

The fixing rates are the arithmetic means, rounded to the nearest one sixteenth, of the bid and offered rates for $10m quoted by the market to five reference banks at 11 a.m. each working day. The banks are National Westminster Bank, Bank of Tokyo, Deutsche Bank, Banque Nationale de Paris and Morgan Guaranty Trust.

FINANCIAL FUTURES

Eurodollar record

Trading was quite hectic on the London International Financial Futures Exchange yesterday. Eurodollars for June delivery opened sharply lower at 88.47, following the weakness of U.S. money markets on Monday as a result of comments by Dr Henry Kaufman of Salomon Brothers on Friday about a possible spectacular rise in U.S. interest rates. This triggered some heavy selling which disappointed traders hoping the contract was at a low point within the present cycle. Very firm Eurodollar interest rates in the cash market also increased the volume of selling, and the market fell to a low of 88.32, encouraged by a further rise in U.S. bank prime lending rates to 12½ per cent from 12 per cent. As trading on Liffe touched a record of 7,402 for all Eurodollar delivery dates the June contract closed at 88.35, compared with 88.74 on Friday.

Gilt futures also opened weak in response to the decline of the U.S. bond market and on fears of a rise in UK clearing bank base lending rates. The June contract opened at 104.29, and touched a low of 104.24, but then rallied on better than expected mid-April money supply figures, rising to a high point of 105-19 as banks failed to lift base rates and U.S. bond prices opened rather firmer than anticipated. June gilts closed at 104-28, compared with 105-16 previously, as prices retreated with the market once again reflecting fears that U.S. interest rates will remain firm.

Three-month sterling deposits showed a similar trend to gilt futures, with June delivery closing at 90.62, against 90.77 as fears remained alive about higher bank base rates.

Trading in the new stock index was fairly quiet. The June contract fell rapidly from an opening of 111.70 to find some support at 110.00, but then continued to decline in line with the cash market, despite a general feeling that the present future's price represents arbitrage opportunities.

LONDON

THREE-MONTH EURODOLLAR $1m points of 100%

	Close	High	Low	Prev
June	88.35	88.48	88.32	88.74
Sept	87.68	87.84	87.68	88.18
Dec	87.27	87.41	87.25	87.77
March	86.92	86.98	86.92	87.43
June	86.58	86.65	86.58	87.11

Volume 7,402 (6,258)
Previous day's open int. 15,358 (15,521)

THREE-MONTH STERLING DEPOSIT £250,000 points of 100%

	Close	High	Low	Prev
June	90.62	90.71	90.54	90.77
Sept	90.16	90.27	90.08	90.30
Dec	89.72	89.75	89.70	89.93
March*	89.33	89.47	89.33	89.58
June*	89.07	—	—	89.32

Volume 2,328 (3,100)
Previous day's open int. 8,962 (8,359)
* £500,000 points of 100%

20-YEAR 12% NOTIONAL GILT £50,000 32nds of 100%

	Close	High	Low	Prev
June	104-28	105-19	104-24	105-16
Sept	104-06	104-08	104-05	104-26
Dec	103-21	103-23	103-21	104-09
March	103-10	—	—	103-30
June	102-31	—	—	103-16

Volume 3,500 (2,529)
Previous day's open int. 6,481 (6,306)
Basis quote (clean cash price of 13¼% Treasury 2003 less equivalent price of near futures contract) 22 to 34 (32nds)

STERLING £25,000 $ per £

	Close	High	Low	Prev
June	1.3845	1.3925	1.3820	1.4140
Sept	1.3925	1.4000	1.395	1.4210
Dec	1.4010	—	—	1.4380

Volume 165 (1,760)
Previous day's open int. 2,916 (2,110)

DEUTSCHE MARKS DM 125,000 $ per DM

	Close	High	Low	Prev
June	0.3611	0.3622	0.3607	0.3700
Sept	0.3660	0.3663	0.3660	0.3749

Volume 129 (80)
Previous day's open int. 451 (462)

SWISS FRANCS SwFr 125,000 $ per SwFr

	Close	High	Low	Prev
June	0.4413	0.4416	0.4402	0.4486
Sept	0.4493	—	—	0.4586

Volume 15 (222)
Previous day's open int. 1,589 (1,390)

JAPANESE YEN Y12.5m $ per Y100

	Close	High	Low	Prev
June	0.4382	0.4394	0.4380	0.4432
Sept	0.4436	—	—	0.4486

Volume 44 (3)
Previous day's open int. 419 (418)

FT-SE 100 INDEX £25 per full index point

	Close	High	Low	Prev
June	110.05	111.70	109.90	112.55
Sept	111.05	111.65	111.05	113.40
Dec	112.00	—	—	115.00

Volume 1,176 (694)
Previous day's open int. 364 (294)

CHICAGO

U.S. TREASURY BONDS (CBT) 8% $100,000 32nds of 100%

	Latest	High	Low	Prev
June	63-16	63-18	63-02	63-07
Sept	62-29	62-30	62-15	62-20
Dec	62-15	62-15	62-00	62-06
March	62-03	62-03	61-20	61-26
June	61-24	61-24	61-11	61-15
Sept	61-15	61-15	61-03	61-06
Dec	61-07	61-07	60-27	60-30
March	61-00	61-00	60-20	60-23

U.S. TREASURY BILLS (IMM) $1m points of 100%

	Latest	High	Low	Prev
June	89.63	89.65	89.51	89.61
Sept	89.07	89.10	88.94	89.09
Dec	88.57	88.71	88.58	88.72
March	88.36	88.39	88.29	88.42
June	88.09	88.09	88.01	88.18
Sept	87.85	87.91	87.81	87.96
Dec	87.63	87.65	87.63	87.77
March	87.50	87.50	87.46	87.61

CERT. DEPOSIT (IMM) $1m points of 100%

	Latest	High	Low	Prev
June	88.60	88.62	88.44	88.64
Sept	87.94	88.01	87.78	88.03
Dec	87.49	87.56	87.38	87.60
March	87.14	87.18	87.02	87.23

THREE-MONTH EURODOLLAR (IMM) $1m points of 100%

	Latest	High	Low	Prev
June	88.14	88.19	88.01	88.21
Sept	87.49	87.55	87.35	87.58
Dec	87.05	87.11	86.92	87.16
March	86.68	86.73	86.56	86.80
June	86.32	86.48	86.30	86.50

STERLING (IMM) $s per £

	Latest	High	Low	Prev
June	1.3890	1.3930	1.3815	1.3880
Sept	1.3960	1.4005	1.3895	1.3955
Dec	1.4060	1.4065	1.3970	1.4030
March	1.4140	1.4160	1.4070	1.4110

GNMA (CBT) 8% $100,000 32nds of 100%

	Latest	High	Low	Prev
June	66-29	67-00	66-22	66-27
Sept	65-23	65-28	65-18	65-23
Dec	64-24	64-28	64-20	64-25
March	63-30	63-30	63-30	64-00
June	63-09	63-11	63-06	63-11
Sept	62-24	62-26	62-23	62-26
Dec	62-11	62-13	62-10	62-13

COMPANY NOTICES

London American Energy N.V.

Notice to Shareholders

A distribution of $30 per share (by way of capital repayment) was approved by shareholders at the Annual General Meeting of the Company on 7th May 1984 and is payable on 25th May 1984.

Payment on registered shares will be made in dollars to or to the order of the holders on record on 5th May 1984.

Payment on bearer shares will be made in dollars by cheque or by transfer to an account maintained by the payee with a bank in New York City against presentation of coupon number seven at the offices of J. Henry Schroder Wagg and Co Limited, 120 Cheapside, London EC2V 6DS or J. Henry Schroder Bank and Trust Company, One State Street, New York 10004, or Banque Generale du Luxembourg S.A., 14 Rue Aldringen, Luxembourg.

London American Energy N.V.

9th May 1984

London clearing banks' balances

as at April 18 1984

THE TABLES below provide the first monthly indication of the trends of bank lending and deposits, ahead of the more comprehensive banking and money supply figures published later by the Bank of England. They are prepared by the London clearing banks and cover the business of their offices and their subsidiaries (excluding Scottish and Northern Ireland banks) in England and Wales, the Channel Islands and the Isle of Man which are listed by the Bank of England as falling within the monetary sector.

TABLE 1. AGGREGATE BALANCES

LIABILITIES	Total outstanding £m	Total outstanding £m	Change on month £m	Change on month £m
Sterling deposits:				
UK monetary sector	16,917		−811	
UK private sector	54,812		+885	
UK public sector	1,036		−303	
Overseas residents	9,463		+525	
Certificates of deposit	6,609		+857	
		88,836		+1,152
of which: Sight		29,640		+174
Time (inc. CD's)		59,195		+978
Foreign currency deposits:				
UK monetary sector	16,425		+872	
Other UK residents	4,729		+260	
Overseas residents	41,387		+1,570	
Certificates of deposit	6,315		+93	
		68,856		+2,796
Total deposits		157,692		+3,948
Other liabilities*		21,444		+813
TOTAL LIABILITIES		179,136		+4,762
ASSETS				
Sterling				
Cash and balances with Bank of England		1,399		−34
Market loans:				
Discount houses	3,480		+82	
Other UK monetary sector	13,676		−120	
UK monetary sector CD's	2,405		+200	
Local authorities	1,057		+26	
Other	1,123		+69	
		21,742		+256
Bills:				
Treasury bills	157		+50	
Other bills	1,155		+93	
		1,312		+143
Special deposits with Bank of England		—		—
Investments:				
British Government stocks	2,734		−19	
Other	4,044		+35	
		6,778		+16
Advances:				
UK private sector	60,004		+760	
UK public sector	361		−23	
Overseas residents	4,519		+475	
		64,884		+1,212
Other sterling assets*		10,563		+355
Foreign currencies				
Market loans:				
UK monetary sector	17,002		+827	
Certificates of deposit	633		−47	
Other	29,352		+1,608	
		46,987		+2,388
Bills		117		+5
Advances:				
UK private sector	4,941		+124	
UK public sector	691		−25	
Overseas residents	15,406		+208	
		21,038		+307
Other foreign currency assets*		4,316		+112
TOTAL ASSETS		179,136		+4,762
Acceptances		3,339		+206
Eligible liabilities		67,023		+1,202

* Includes items in suspense and in transit.

TABLE 2. INDIVIDUAL GROUPS OF BANKS' BALANCES

	TOTAL Out-standing £m	TOTAL Change on month £m	BARCLAYS Out-standing £m	BARCLAYS Change on month £m	LLOYDS Out-standing £m	LLOYDS Change on month £m	MIDLAND Out-standing £m	MIDLAND Change on month £m	NATIONAL WESTMINSTER Out-standing £m	NATIONAL WESTMINSTER Change on month £m	WILLIAMS & GLYN'S Out-standing £m	WILLIAMS & GLYN'S Change on month £m
LIABILITIES												
Total deposits	157,692	+3,948	42,273	+958	29,498	+841	30,990	+552	50,646	+1,628	4,284	−31
ASSETS												
Cash and balances with Bank of England	1,399	−34	460	+55	214	−31	265	+23	409	−89	51	+8
Market loans:												
UK monetary sector	34,158	+790	9,541	−83	4,508	+128	4,000	+47	15,351	+781	759	−84
Other	34,571	+1,855	8,790	+380	7,636	+431	7,615	+343	9,506	+680	1,024	+21
Bills	1,429	+148	613	+116	275	+55	263	−42	259	+17	19	+3
British Government stocks	2,734	−19	802	−34	677	—	610	+22	573	—	72	−7
Advances	85,923	+1,520	23,811	+696	17,225	+307	16,993	+83	25,412	+404	2,481	+30

TABLE 3. INDIVIDUAL GROUPS OF BANKS' ELIGIBLE LIABILITIES

	TOTAL Out-standing £m	TOTAL Change on month £m	BARCLAYS Out-standing £m	BARCLAYS Change on month £m	LLOYDS Out-standing £m	LLOYDS Change on month £m	MIDLAND Out-standing £m	MIDLAND Change on month £m	NATIONAL WESTMINSTER Out-standing £m	NATIONAL WESTMINSTER Change on month £m	WILLIAMS & GLYN'S Out-standing £m	WILLIAMS & GLYN'S Change on month £m
ELIGIBLE LIABILITIES	67,023	+1,202	20,190	+329	13,417	+253	11,822	+241	19,627	+373	1,968	+7

INTERNATIONAL CAPITAL MARKETS

Eurodollar bonds hit by U.S. pessimism

By Mary Ann Sieghart in London

PRICES of Eurodollar bonds tumbled yesterday – in some cases by over 1 point – in response to a deeply pessimistic New York market.

The six-month Eurodollar rate rose to 12 per cent, up nearly ½ point on Friday's close, and dealers reported no buying interest. Turnover was low in the secondary market which had a very nervous undertone.

The D-Mark sector was also badly hit, with prices falling by ¾ point since Friday. This forced the cancellation of Credit d'Equipement des Petites et Moyennes Entreprises' scheduled DM 150m bond.

It also meant that the European Investment Bank had to pay a high 8 per cent coupon on its 10-year DM 250m bond launched through Deutsche Bank. The issue, which is priced at 99½, traded at a discount of just over 1 point.

Finland is raising NKr 200m through a five-year, 11¾ per cent bond led by Den norske Creditbank. Priced at par, this is the first Norwegian kroner bond issue since March.

Today should see the launch of a £75m–£100m bulldog bond for Electricité de France. It is likely to have a 28-year maturity and will probably be led by Kleinwort Benson.

Malaysia is tapping the Swiss franc market for between SwFr 80m and SwFr 100m with an eight-year bond paying around 6⅛ per cent. Lead manager Credit Suisse will price the deal on Friday.

Yamaichi Securities is leading a Y15bn Samurai bond for the City of Oslo. It has a 10-year life and a 7.3 per cent coupon at a price of 99.45.

Prices in Switzerland were down ¼ point yesterday on the back of a strong dollar and worries about interest rates.

BHF Bank bond average

May 8		Previous
99.424		99.490
High	1984	Low
100.009		98.056

CLASSIFIED ADVERTISEMENT RATES

	Per line (min. 3 lines) £	Single column cm (min. 3 cms) £
Commercial & Industrial Property	9.50	33.00
Residential Property	7.50	25.00
Appointments	10.00	34.50
Business, Investment Opportunities	9.50	33.00
Business for Sale/Wanted	9.50	33.00
Personal	7.50	25.00
Motor Cars	7.50	25.00
Hotels & Travel	7.50	25.00
Contracts & Tenders	9.50	33.00
Book Publishers	—	net 15.50

Premium positions available
(Minimum size 30 column cms)
£6.00 per single column cm extra
For further details write to:
Classified Advertisement Manager
Financial Times
10, Cannon Street, EC4P 4BY

FT INTERNATIONAL BOND SERVICE

The list shows the 200 latest international bond issues for which an adequate secondary market exists. The following are closing prices for May 8.

U.S. DOLLAR STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Alaska Housing 11¾ 94	100	93¾	94¼	−0½	−0⅞	12.84
American Savings 12 89	125	97½	98	−1½	−1⅝	12.63
Australia Comm 11⅛ 90	100	97	97½	−0⅝	−0⅛	11.86
Australia Comm 11½ 95	300	91	91½	−0½	−0¾	12.98
Australia Comm 11⅝ 98	100	91	91½	0	−0⅛	12.97
Australian Ind Dev 11 89	75	†92⅝	93⅛	−1⅛	−1⅛	13.07
Bank Of Tokyo 11⅞ 90	100	93⅛	93⅝	−1¼	−1⅝	13.41
Beneficial O/S Fin 12 91	100	91⅞	92⅜	−1½	−1⅝	13.98
Canada 10½ 88	500	95¾	96¼	−0⅛	−0⅝	12.04
Chicorp O/S 11¾ 89	100	95⅜	95⅞	−1⅛	−1½	12.49
D.N.C. 11¾ 91 WW	50	†92	92½	−0⅞	−1½	13.54
D.N.C. 11¾ 91 XW	50	†91	91½	−1⅛	−1⅝	13.79
Denmark Kingdom 12 91	100	92⅛	92⅝	−1½	−1½	13.74
Denmark Kingdom 12¼ 93	100	93⅛	93⅝	−1⅜	−1⅜	13.43
Digital Equip 11¾ 89	150	95⅞	96⅜	−0⅛	−0⅝	12.85
Dutch Mines 11¾ 91	150	†91	91½	−1⅛	−1½	13.38
E.D.C. 11⅛ 89	150	93¼	93¾	−0⅛	−0⅝	13.00
E.E.C. 12 93	50	95⅛	95⅝	−0⅛	−0⅜	12.83
E.I.B. 11½ 90	200	92	92½	−0⅝	−0½	13.28
Eksportfinans 11½ 90	100	91⅜	91⅞	−0½	−0⅝	13.47
Eurofima 12½ 91	100	95⅛	95⅝	−1⅛	−1⅞	13.53
Gen Elec Credit 11 91 WW	200	91⅝	92⅛	−0⅛	−0½	12.94
GMAC O/S Fin 11⅞ 90	100	94⅞	95⅜	−0¾	−0⅞	12.49
Gulf & Western 12⅛ 89	100	96⅝	97⅛	−0⅝	−0⅞	13.01
I.U.I. 12 89	100	94⅞	95⅛	−0⅞	−1⅛	13.48
Indust Bk Japan 11½ 89	125	94½	94⅞	−0⅝	−0⅝	13.12
Indust Bk Japan 11⅞ 91	100	93	93½	−1⅛	−1⅝	13.31
Int Paper O/S Fin 12 91	75	96⅛	96⅝	−0⅝	−1⅛	12.81
ITT Finance 11½ 89 WW	125	96⅜	96⅞	−0⅝	−0⅝	12.33
L.T.C.B. 11⅞ 89	100	94¼	94¾	−0⅛	−0⅝	13.46
L.T.C.B. 12½ 90	85	96⅛	96⅝	−1	−1⅛	13.33
Macy O/S 11¾ 91	100	94	94½	−0½	−1	13.06
Mitsui Trust Fin 12 91	100	92¾	93¼	−1⅛	−1⅜	13.82
Montreal, City 12½ 91	70	96	96½	−1	−1⅜	13.35
Morgan Guaranty 12¼ 89	150	96	96½	—	—	13.32
Nat Gasunie 11⅛ 91	75	92	92½	−0⅝	−1⅛	13.01
Nippon Credit 11⅞ 90	100	92⅜	92⅞	−1⅛	−1⅜	13.81
Nippon Tele 11⅞ 90	100	94	94½	−1	−1⅜	12.81
Nova Scotia Pro 11⅞ 91	100	94	94½	−0⅝	−1	13.05
Ontario Hydro 11⅝ 94	200	91¾	92¼	−0½	−1	13.18
P.K. Banken 12 90 WW	75	92¾	93¼	−0⅝	−1	13.94
Prudential 10⅛ 93 XW	150	†83	83½	−0½	−0⅞	13.28
Quebec Hydro 11½ 92	100	†93⅝	94⅛	−0⅝	−0¾	12.65
Quebec Province 12⅛ 94	150	96½	97	−0⅝	−0⅞	12.83
Royal Bk of Can 11½ 89	100	93	93½	−1⅛	−1⅜	13.47
Rural & Ind Bk 12 91	50	94⅛	94⅝	−0¾	−0⅞	13.28
Sears O/S Fin 11½ 88	125	97¾	98¼	+0⅛	−0⅝	12.85
Sears O/S Fin 11⅝ 91	150	93½	94	−0⅝	−0¾	13.04
Sec Pac O/S Fin 11⅝ 89	75	†92	92½	0	−0⅝	13.92
Sec Pac O/S Fin 12 92	100	94¼	94¾	−0⅝	−0⅝	13.14
S.E.K. 11½ 89	100	92⅞	93⅜	−0⅝	−0⅛	13.60
Shearson/Amex 12⅛ 94	100	93½	94	−0⅛	−0⅛	13.28
Sweden Kingdom 12⅜ 89	200	96⅛	96⅝	−0¾	−0⅞	13.41
Texas Insts Int 11⅛ 91	150	92⅞	92⅞	−1⅛	−1⅜	13.57
Tokai Asia 12¼ 91	100	93½	94	−1⅛	−1½	13.69
World Bank 11¼ 90	200	91¾	92¼	−0⅝	−0⅝	13.12
World Bank 11⅝ 89	200	94⅞	95½	−0⅛	−0⅝	12.85
World Bank 12 93	200	95	95½	−0⅛	−0½	12.87
Yasuda Tst&Fin 12⅛ 89	100	95	95½	−0½	−0⅝	13.45

Average price change... On day −0⅝ on week −0⅞

DEUTSCHE MARK STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Allied Chemical 7½ 94	125	99½	100	−0⅛	0	7.53
Amca Int'l 8¾ 91	100	100½	101	−0⅛	+0⅛	8.19
A.N.A.S. 8½ 91	150	100⅝	101⅛	+0⅛	−0⅛	8.28
Austria, Republic 7⅝ 94	200	98	98½	−0⅛	−0⅛	7.88
Baxter Travenol 7¼ 94	200	97½	98	−0⅛	−0⅛	7.58
Credit National 8⅛ 94	200	99½	100	−0⅛	−0⅛	8.15
Degussa Int Fin 7½ 94	100	100⅝	101⅛	−0⅛	−0⅛	7.34
E.E.C. 8 92	200	99½	100	−0½	0	8.03
E.I.B. 8 91	250	99⅛	99⅝	−0⅝	−0½	8.05
Escom 8 92	150	98¼	98¾	−0⅛	0	8.26
[illegible]						

OTHER STRAIGHTS; FLOATING RATE NOTES; CONVERTIBLE BONDS; SWISS FRANC STRAIGHTS; YEN STRAIGHTS: [illegible]

* No information available—previous day's price.
† Only one market maker supplied a price.

Straight Bonds: The yield is redemption of the mid-price; the amount issued is in millions of currency units except for Yen bonds where it is in billions. Change on week = Change over price a week earlier.

Floating Rate Notes: Denominated in dollars unless otherwise indicated. Coupon shown is minimum. C.dte = Date next coupon becomes effective. Spread = Margin above six-month offered rate (‡ three month; § above mean rate) for U.S. dollars. C.cpn = current coupon. C.yld = current yield.

Convertible bonds: Denominated in dollars unless otherwise indicated. Chg. day = Change on day. Cnv. date = First date for conversion into shares. Cnv. price = Nominal amount of bond per share expressed in currency of share at conversion rate fixed at issue. Prem = Percentage premium of the current effective price of acquiring shares via the bond over the most recent price of the shares.

OVER-THE-COUNTER

Continued from Page 32

[illegible]

FINANCIAL TIMES SURVEY

DINORWIG

Hydro-electric power scheme

This giant £450m engineering plant inside a mountain is a key part of the UK's stand-by capacity, able to respond in ten seconds to demands on the national grid

Survey by Robin Reeves

THE LARGEST hydro-electric pumped storage scheme in Europe will be officially opened today by Prince Charles in the heart of the mountains of Snowdonia, the culmination of an idea first conceived 15 years ago by Britain's Central Electricity Generating Board.

Constructed over the past 10 years at a cost of £450m, the scheme is now being hailed as a major civil engineering achievement, and one which also offers important lessons in the management of industrial relations in large projects and in sensitivity towards the environment. Commercially, too, the project is proving a success.

Yet, the initial obstacles in the way of the scheme were many. The project at Llanberis was first mooted when the CEGB's electricity demand curves were still pointing upwards. More capacity, rather than more flexibility and economy in operation, was still the main priority. Dinorwig emerged at the top of the CEGB's projects pile, somewhat fortuitously, after the board had been forced to pause in its nuclear programme because of the severe problems run into by the advanced gas cooled reactor system.

Promoted by Act of Parliament rather than a local public inquiry, the project ran into a storm of protest from conservation interests, alarmed at what they feared would be desecration of a national park. But crucially, the then main local authority involved, Caernarfonshire County Council, agreed to support the scheme in exchange for a wide range of assurances, including a commitment that at least 70 per cent of the workforce would be recruited locally.

Considerable modifications and alterations to the original design were also introduced to meet the environmental objections.

Tunnel

Within weeks of starting on site in early 1974, the initial exploratory tunnel collapsed just minutes before it was due to be occupied by the morning shift. For several months, the future of the whole scheme hung in the balance while the wisdom of trying to build an underground power station in slate rock—never tunnelled on such a large scale before—was re-examined.

This major uncertainty, combined with the high inflation of the period, produced a distinct reluctance on the part of the civil engineering industry to tender in the normal way for what was at the time the largest civil contract ever offered in the UK. It was only overcome by inviting potential contractors to discuss the scheme in detail and encouraging them to form consortia to bid for a target price/cost-reimbursable contract.

The basic concept of Dinorwig, in an increasingly complicated world, remains simple. It does two things: one is to store electrical power by using cheap night-time electricity to pump water from a lower to an upper reservoir; the other is to generate power by allowing the same water to flow back down to the lower reservoir generating hydro-electric power to meet day-time peaks in demand. Its turbines are capable of both pumping and generating.

Britain's first major pumped storage station opened at Ffestiniog just over the mountains from Dinorwig in 1963. Two more were built at Crachan and Foyers in Scotland before Dinorwig got under way. But none came near to matching either the scale or the civil engineering challenge presented by the Dinorwig scheme at the outset.

In the course of the past ten years, more than 3m tonnes of slate have been blasted and excavated to form a 11.4-km maze of tunnels and create Europe's largest man-made cavern—the machine hall—deep inside Elidr mountain at the foot of the Llanberis pass.

The tunnels have been lined with ½m cubic metres of concrete, enough to fill Wembley Stadium to a depth of 100 ft, and the machine hall—180 metres long, 24 metres wide and 60 metres high—and associated caverns have been equipped with six 300-megawatt reversible pump turbines (linked vertically to generator motors with rotors weighing 445 tonnes each), a transformer substation and a vast array of associated hydraulic, mechanical and electrical equipment.

A further 9m tonnes of slate waste and other material, most of it the result of more than 150 years of intensive slate quarrying on the site, has also been shifted around to adapt two natural Snowdonia lakes—Llyn Marchlyn Mawr and Llyn Peris—to the hydraulic requirements of the scheme.

At its peak, the project employed a workforce of 2,600, more than 90 per cent of whom were recruited locally. The labour force was equipped for its task by unprecedented on-site training facilities which also made a key contribution to Dinorwig's excellent industrial relations. By comparison with other major construction sites, stoppages were minimal and none lasted for longer than three weeks.

The safety record was also exemplary: over the 10-year construction period there were just five fatalities of which one only was due to a rock fall. The grim prediction at the start of the project—based on Alpine tunnel driving and similar major underground projects—was at least 30 deaths.

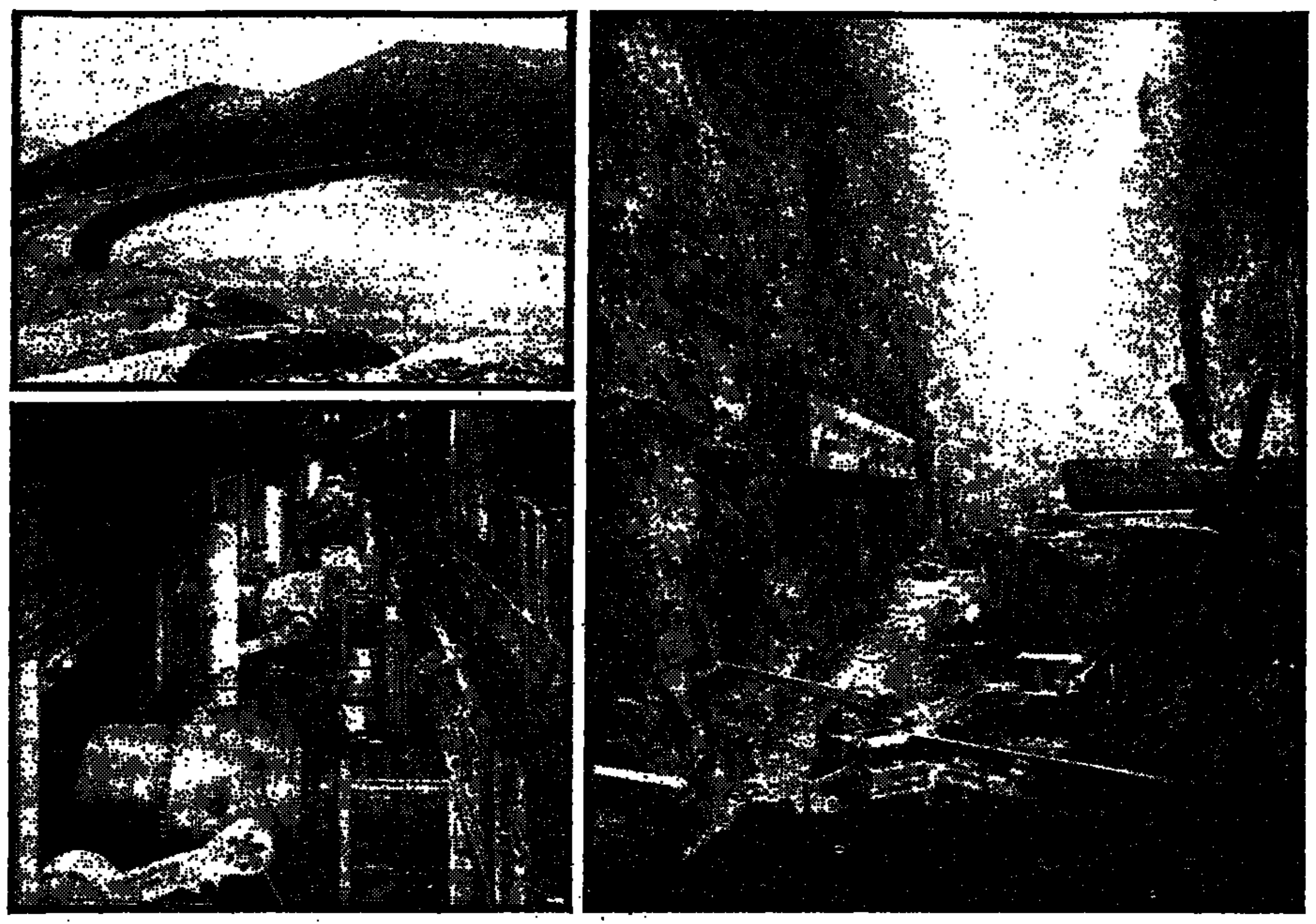
The result of the labours of the men of Gwynedd and of the plant and equipment manufacturers is a hydro-electric pumped storage station of 1,800 MW installed generating capacity, six times the capacity of Ffestiniog a few miles away; yet, thanks to the tremendous attention paid to the environmental impact, far less of an intrusion into the landscape. Indeed, in a few years' time, it will be barely noticeable from most viewpoints.

The scheme is exceeded in size by a U.S. station, Luddington, and another as yet unfinished American scheme in Bath county. But so far unique to Dinorwig is its unprecedentedly rapid response to power demand. It has the capacity to "plug" up to 1,300 MW of power into the national grid in 10 to 11 seconds to meet breakdowns in supply from conventional stations or sudden surges in electricity demand—the fastest response rate of any pumped storage station in the world.

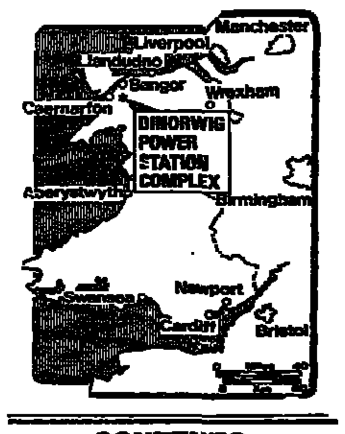
In practice, Dinorwig has completely altered the way in which the CEGB manages the electricity supply system from day to day. No longer is it required to run fossil fuel stations partially, and therefore inefficiently, loaded for unexpected demand surges or supply breakdowns. Thanks to Dinorwig, the CEGB's "spinning reserve"—the stand-by capacity essential to meet its statutory obligation to provide a reliable supply of electricity at all times—is now being maintained wholly by hydroelectric stations.

Overall, the CEGB calculates the fuel and other costs savings stemming from the new flexibility which Dinorwig has introduced into the management of the national grid day-to-day at a figure approaching £50m a year, or more than £2 a head for its 20m consumers.

CONTINUED ON NEXT PAGE



THE PROJECT HAS INVOLVED CIVIL, ELECTRICAL AND HYDRAULIC ENGINEERING ON A BIG SCALE



CONTENTS

DINORWIG 2

Careful planning has ensured that both landscape and natural habitats are safeguarded

Strong influence by environment groups

ALTHOUGH Britain's environmental organisations would rather Dinorwig had never been built in a national park, their pressure did play an important part in the initial site selection and the efforts made to minimise its impact upon the landscape.

Unlike two other potential sites further east, near Dolwyddelen and Croesor, the Dinorwig scheme could be based upon two existing lakes so that no fine landscape would be drowned.

It was the CEGB's response to the environmental implications which led to the appointment of Sir Frederick Gibberd Coombes and Partners as landscape consultants for the scheme as early as 1970. It was Sir Frederick's detailed studies, presented to the parliamentary inquiry in 1973, emphasising the need for good design to fit into preserving the scenic views of the Llanberis Pass and the Snowdon massif, which played a key role in overcoming opposition to the scheme from a number of quarters.

At the same time, environmental pressure led to the 400 kv transformer substation required for the station, and the 11 km cable linking Dinorwig with the national grid being placed underground, at considerable extra expense.

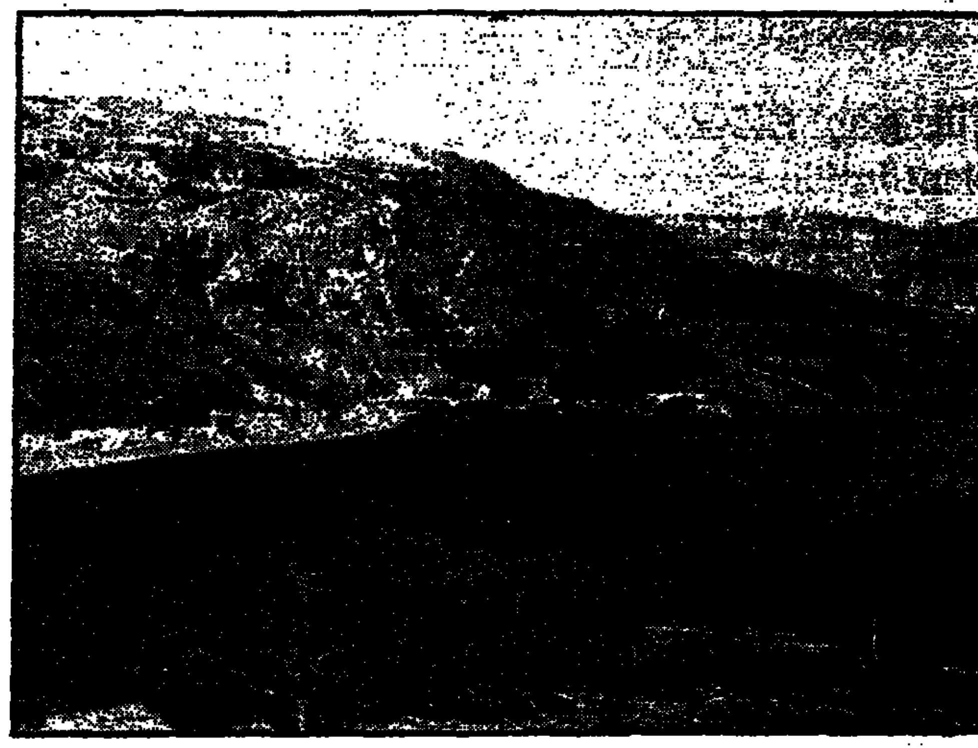
Under the original proposals, it was also planned to enlarge the capacity of Llyn Peris (the lower lake) by building high embankments. But then because of the impact on the landscape, it was agreed instead to excavate the bed of the lake and widen it by removing quarry detritus to achieve the same effect.

Low-lying

The key aspect of the final design of all the works and structures around Llyn Peris is that they have been made as low lying as possible to preserve the special flat valley floor character of the landscape.

Detailed studies were made to work out ways of dealing with the disposal and shaping of the large amounts of slate waste generated by the construction programme, the tailworks, and the tunnel portel forming the main entrance to the power station.

A low embankment had to be built along the northern side of the lake to carry the access road to the power station, since the final design still involved raising the top water level of Llyn Peris by 2.8 metres. But it follows the line of the old quarry road from Llanberis and its scale and the use of slate masonry in associated structures have kept it in harmony with the quarry landscape.



View across Llyn Peris showing (centre) the Wellington Pool bridge where water is discharged from the power station into the lake. The carved out lower slopes of the Elidir Fawr bear witness to a century of slate quarrying

Marchlyn Mawr, the upper lake, was formed originally by a natural scree dam. The landscape strategy was to preserve its remote, wild appearance by rebuilding and enhancing it with a concrete structure. The outcome is a rockfill dam 600m long and 40m high, curved in plan so as to fit more naturally into its surroundings.

There are some outside buildings, designed by the CEGB architects' department. These include a series of cooling stations along the underground cable route. But they have all been made to match the scale, shape and materials of other buildings in the locality. In a few year's time, the CEGB says, Dinorwig will be barely visible to all but the most observant.

During construction, a wide haul road was required to transport the large quantities of fill for the dam. But this road has now been removed and the contours graded so that the permanent access road is largely masked.

Great trouble was taken also to ensure restoration of natural ground cover. Surveys were made of the various top soils and groundcover vegetation. The thin topsoil was stockpiled during construction and then replaced on completion. Heather seed was collected from the surrounding area and propagated at University College Bangor for planting on the dam face, along with selected grasses.

Despite the botanically inhospitable climate—Marchlyn Mawr at 636 metres above sea level is the highest reservoir in Britain suffering up to 200 frosts a year—the process of revegetation is going well.

Engineering structures were set well back into the hillside. Exposed walls have been faced with random stone masonry similar to others found in the area.

Sea trout

Building Dinorwig also posed major worries about the area's natural fauna. The river system feeding and draining Llyn Peris supports populations of salmon, sea trout, brown trout, eels, minnows, sticklebacks and lampreys. Llyn Peris and the neighbouring lake, Llyn Padarn, were home to populations of the unique Welsh Charr, a fish which prefers cold, deep water without great fluctuations in water level.

Before construction started a comprehensive long-term, water quality monitoring programme was introduced to ensure that the habitat was not destroyed inadvertenly by the disturbance of known copper seams and the shifting of slate waste. At the same time some ecological change was inevitable given the need to drain Llyn Peris for three years in order to enlarge its capacity and construct the hydraulic links with the underground station.

There were also serious doubts whether the migratory fish would in practice negotiate the diversionary tunnel in order to reach their swimming grounds. In the event the fish did so, confounding a number of experts.

The modifications to Llyn Peris on the other hand, made it unsuitable as a habitat for Welsh Charr. The solution adopted therefore was to remove the adult fish from the lake during winter, when they came up to spawn, and strip them of ova and milt in order to rear large number of fry. Subsequently, both the adults and the reared fry were released in another lake, a few miles away, previously without charr.

There were also environmental gains. A number of the area's unique dry stone walls have been rebuilt and are now as good as new. Above all, Gynedd Council has inherited £5m worth of badly needed road improvements, as well as another tourist attraction.

In its heyday Dinorwig slate quarry was the world's second larg..st

Chapter of industrial past closes

IT WAS IN July 1979 that a trade union delegation from north-west Wales went to the Welsh Office to plead for government aid to save Dinorwig slate quarry. Attempts to emulate the mechanisation methods being adopted at the neighbouring Penrhyn Quarry by its new owners, MacAlpine, and stem Dinorwig's financial losses, had led to a huge fall of rock in the upper part of the quarry.

The plea was refused. The Government had already contributed £½m towards opening up a new quarry face at Marchlyn, which had not been a success, they were told. And on the return train journey, Sir Michael Duff, the quarry owner, told the delegation that, in the circumstances, the quarry would have to close in a fortnight.

Some 300 men lost their jobs as a result of the quarry closure, not many by modern standards. However, the closure opened the way for the CEGB to use the quarry site for construction of the hydro-electric pump storage scheme, which began five years later. But it was the end of an important chapter in the industrial history of North Wales.

Dinorwig was the world's second-largest slate quarry (neighbouring Penrhyn, which quarries the same Cambrian slate bands from the next valley and continues to be worked on a modest scale, is the largest). Slate's value as a roofing material was recognised from Roman times, but it was at the end of the 18th-century that it became industrialised.

Expansion was rapid. Roofing slates from Dinorwig and other North Wales quarries were shipped all over Britain, and to Continental Europe and North America — to meet the rapidly-expanding housing needs which accompanied the industrial revolution.

Barracks

At its peak, Dinorwig employed 3,500 men, dominating the economic life of the surrounding communities for several generations. Before the arrival of modern transport, quarrymen would travel from as far afield as Anglesey each week, crossing the Menai Straits and walking up from Caernarfon on a Sunday evening and staying in the quarry barracks until Saturday lunchtime when they returned to their families and communities for 24 hours.

The slate was won from the mountainside by developing a series of terraces 60 to 70 feet high, using gunpowder explosions powerful enough to dislodge the rock but not powerful enough to damage it.

The rock was then broken down into slabs capable of being transported down to the dressing mills or sheds where they were sawn mechanically into pieces of slate capable of being split by hand into varying sizes of roofing slates.

It was skilled work but in many areas also dangerous and unhealthy. Rockmen had to be able to work with hammers and heavy chisels on the quarry face hanging from ropes, in all weathers. Conditions in the dressing sheds, while better from the point of protection from the elements, were hazardous because of the problem of slate dust. The industrial disease, silicosis, was a major scourge at Dinorwig because the rock has a higher than average content of silica.

The North Wales quarries were famous for their cultural life. The men gathered for their workbreaks in y caban or the messroom. They were important social and cultural institutions in which the issues of the day, be they a point of religious doctrine, political philosphy or the merits of a new Welsh poem or novel, were debated and discussed.

(Interestingly, the tradition lingered on during Dinorwig power station's construction. The canteen at Glyn Rhonwy became noted within the CEGB for fierce debates and discussions on wide-ranging topics and issues never before aired on CEGB project sites.)

The slate industry reached its zenith towards the end of the 19th century. In 1900 began the longest and probably most difficult dispute in Welsh industrial history—a three-year quarrymen's strike over recognition of the North Wales Quarrymen's Union and its right to negotiate on behalf of the men.

It ended in defeat for the quarrymen, leaving a legacy of bitterness which still lingers to this day. The strike also marked a turning point for the slate industry, giving an impetus to the development of alternative roofing materials to which slate has been losing ground ever since.

A small market for Welsh roofing slates still exists. Indeed, last year, demand was boosted sharply by the generous improvement grants given by the Government before the general election (and since reined back) to the point where the remaining North Wales quarries were unable to meet the demand and slate imports were attracted in from Spain.

The main market for Welsh slate these days, apart from being the basis for a flourishing handicrafts industry, is as a cladding material. As well as its unrivalled hard-wearing properties, architects are fond of using it—budget allowing—because of the look of quality and distinction which slate gives to any building.

The Dinorwig slate quarry will not be forgotten. The quarry terraces, ranged up the mountainside above Llyn Peris like a giant amphitheatre, will be there for centuries to come. Alongside the power station, the former quarry's main workshops have been turned into the North Wales Quarrying Museum to commemorate the industry's unique contribution to Wales's industrial and social history.

£450m power scheme

CONTINUED FROM PREVIOUS PAGE

The original cost of Dinorwig was put at £100m. By the time the enabling act was through Parliament and more precise costings had been carried out, and the estimated final bill was about £120m. Discounting the effects of inflation over a ten-year period, the actual cost has worked out at some £170m, or about 45 per cent above estimate. The usual quoted figure of £450m, which includes changes required in the grid system much further afield is in "mixed pound notes," ie pounds spent at the beginning of the project were worth a lot more than those spent at the end.

The escalation in cost arose for a number of reasons. The collapse of the exploratory tunnel led to a delay of some months and there was also a problem at one stage over the Government release of finance. More tunnelling had to be done than was originally anticipated and there were also commissioning problems with the turbine generators. In the end, commercial power generation commenced in late 1982, some three years beyond the original timetable.

But this is not regarded as a cause for criticism. Using modern estimating techniques, the projected cost would have worked out much nearer the outturn level. More allowance would also have been made not only for the special civil engineering dimensions of the scheme but also for the fact that the turbine generators were fairly unique in design and had to be tested in situ rather than in the manufacturer's premises.

More important, Dinorwig is already proving invaluable in terms of the more efficient running of the national grid. The estimated savings it is generating in the overall cost of operating the grid of approaching £50m means that Dinorwig will have paid for itself within eight to nine years. In short, the CEGB is delighted with its investment.

The main disappointment, particularly locally, is that Dinorwig's success cannot be repeated immediately at one of two other identified sites in Snowdonia. It would help to make a significant dent in Gwynedd's unemployment rate of currently nearly 18 per cent. Because of the fall in electricity demand, the CEGB does not anticipate starting another hydro-electric pumped storage scheme for another eight to ten years.

Complex studies were undertaken to determine the design of various systems

Exacting standards of engineering

THE SCHEME'S hydraulic and mechanical engineering systems are unique both in size and in the amount of pressure they have been built to withstand.

The two key requirements laid down in the original design brief were that the station must be capable of delivering its full output to the grid in about ten seconds, and that it must have a 40-year design life—that is, it will not have to be taken out of commission for overhaul and maintenance during that period. Pocket calculator sums, based on its likely use, quickly established it must therefore be designed to withstand some 300,000 pressure cycles.

The rapid response requirement has involved building a hydraulic system capable of delivering water to the six turbines driving the generators at rates of up to 390 cubic metres a second (85,000 gallons) and with main inlet valves capable of opening in five seconds.

Water from the upper reservoir, which has been enlarged to create a useable volume of 7m cubic metres (1,540m gallons), flows along the near-horizontal low pressure tunnel, vertically down the high-pressure shaft—443 metres deep and 9.5 metres diameter—along the 446 metres high-pressure tunnel, which has a 1 in 10 gradient, and into the high-pressure manifold system feeding six concrete-lined tunnels of 3.8 metres diameter.

Connecting each of these tunnels with the main inlet valves are six steel-lined high pressure penstocks — 170 metres long and narrowing in diameter from 3.3 metres upstream to 2.5 metres at the main inlet valves.

Above the high-pressure shaft is a surge shaft and pond. This has two purposes. One is to act as a "pressure valve" in the system, in circumstances where generation is suddenly cut off, creating an upsurge of water up the High Pressure Shaft. It prevents the kind of juddering in the system which is sometimes experienced in the home when a tap is turned off quickly.

Clearance

The other purpose is to ensure that the hydraulic system always retains an adequate head of water. During maximum downsurge conditions, there might otherwise be a danger of air entering the system.

Overshadowing the basic design of the hydraulic system, however, has been the enormous effort which has gone into ensuring its mechanical reliability—safety might be the better word. Given the nature of the station's operations, stress fatigue was clearly the main problem affecting all pressure part components. Dinorwig's particular nightmare is that the water in the hydraulic system is more than enough to fill the underground station to the rooftop several times over. In these circumstances, there must be no possibility of the pressure parts failing.

This requirement led the CEGB's design team to do extensive studies in the field of fracture mechanics. Advanced finite element mathematical techniques and photo-elastic analysis — modern methods of predicting stress levels—were used to lay down component specifications.

The surge pond under construction. Sited between the upper reservoir and the power station, the pond and high-pressure shaft act as a pressure valve and also ensure that the hydraulic system holds an adequate head of water

The outcome was contracts for some of the highest-quality castings ever ordered, particularly for the penstocks. All these components, made from top quality manganese steel rather than normal high-pressure steel, were subject to ultrasonic scanning and magnetic particle inspection to locate and size all measurable defects.

Fracture mechanics calculations were applied to establish whether the defects found would last the 40-year design life. Unacceptable imperfections had to be cut into and repaired by welding. In high-stress areas, very small defects indeed had to be treated this way.

Cooling

Once installed, the pressure components were again subject to stress gauge analysis using automatic scanning equipment specially designed for the purpose. This equipment records the results on film and tape for future comparison. In this way, crack growth can be monitored and, so far, all in-service inspections have confirmed that the pressure components are indeed meeting the design life worked out.

The six pump turbines are vertically mounted and directly coupled through intermediate shafts to six generator motors immediately above them. Each pump turbine is reversible and operates at a nominal speed of 500 revolutions per minute in either direction.

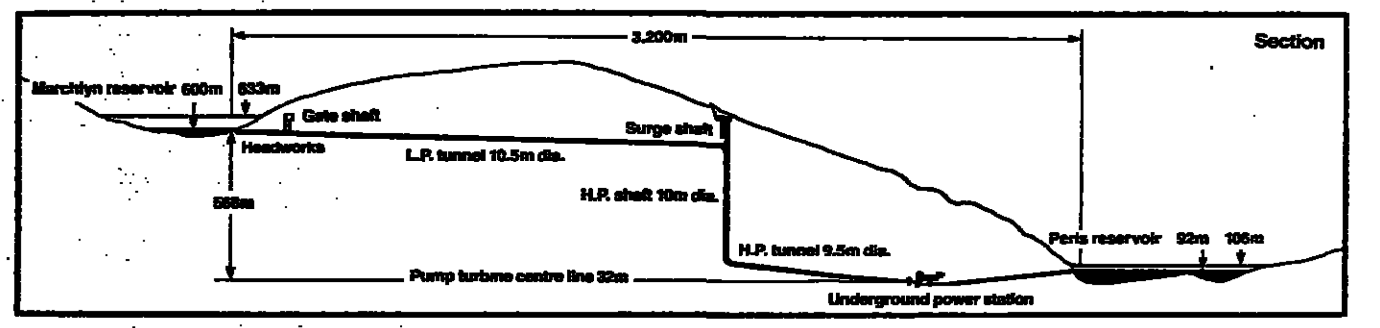
The moving element of the pump turbine is a horizontal "runner"—a form of water wheel—which rotates in a clockwise direction (viewed from above) when generating power and anti-clockwise when pumping.

The flow of water into the runner is controlled by inlet valve guide vanes under the influence of a governor system. But there is also an ingenious arrangement which allows the pump turbine to rotate in a bubble of compressed air instead of water. This significantly lowers the response time of the turbines to changes in their mode of operation and is, above all, the key to the ten-second rapid response requirement.

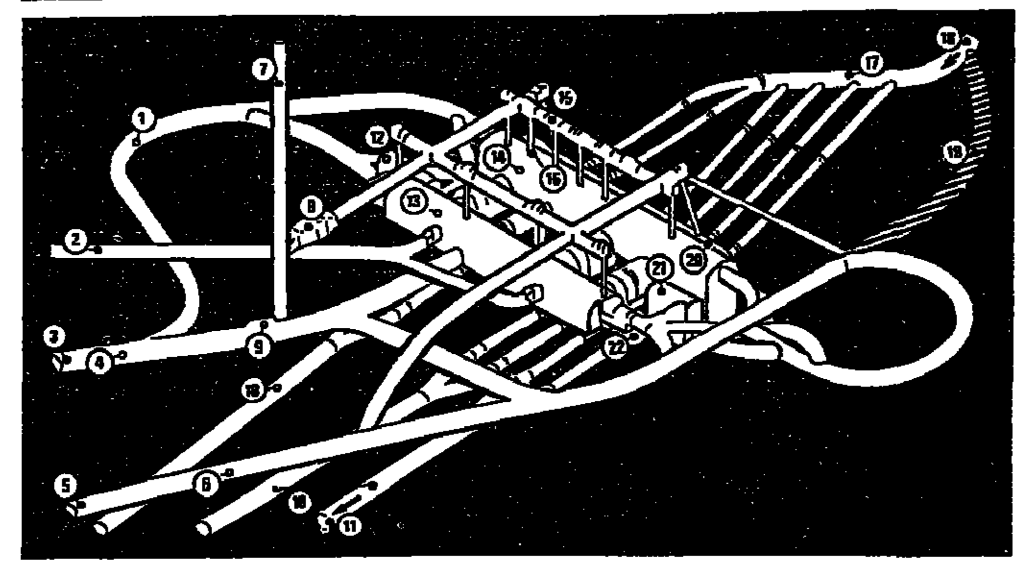
It also allows a significant reduction in the amount of power required to either start pumping or keep the machines spinning on standby.

Completing the hydraulic system are six tailrace tunnels, which narrow to three as they climb up a gradient of 1 in 7.5 to join the lower reservoir, Llyn Peris. The level of Llyn Peris itself is controlled by three bascule gates.

The normal flow of water down the Llanberis Pass is diverted through a diversionary tunnel. But the facility to "dewater" the hydraulic system is required after exceptionally heavy rainfall. The bascule gates linking Llyn Peris with neighbouring Llyn Padarn allow a controlled outflow as required.



MAIN CAVERNS AND TUNNELS



KEY

1 Valve galleries access tunnel
2 To surface and Llyn Padarn
3 Main access portal
4 Plant access tunnel
5 Access portal
6 Emergency access tunnel
7 Ventilation saft and chimney
8 Main heating and ventilating extraction fans
9 Switch house for heating and ventilating fans
10 Tailrace tunnels
11 To tailworks and Llyn Peris (lower reservoir)
12 Starting equipment house 1
13 Transformer hall
14 Machine hall
15 Ventilation tunnels (high level)
16 Ventilation shafts
17 High pressure tunnel
18 From Marchlyn Mawr (upper reservoir)
19 Construction tunnel (blocked off)
20 Main inlet valve gallery
21 Starting equipment house 2
22 Draft tube valve gallery

Limited space and the need for reliability posed additional problems

Complex electrical solutions

ELECTRICALLY, Dinorwig is unusual in having the first 400 KV substation ever to be built underground. It also has an exceptionally complex system of busbars, the heavy electrical conductors which connect the substation's 23 transformers and six 300 MW generators—a consequence of both the number of machines and the station's use of variable frequency start-up equipment.

The space available for the electrical equipment underground was strictly limited and this led the CEGB to opt to equip the substation with suphur hexafluoride (SF6) gas-filled, metal clad switchgear, in preference to traditional switchgear, because of its spacesaving advantages.

The aluminium busbars had to be equipped with a complex interlocking system to prevent the plant being damaged electrically in the event of a fault. The busbars were sent to KEMA in the Netherlands for extensive testing to ensure that they could withstand the most major electrical incident.

Winding of the stators of the generator motors, built by GEC Machines of Rugby, was carried out on site rather than in the factory. This avoided the need to transport the stators in sections and weld joints in the machines which can cause overheating problems.

Downsurge

But this, in turn, meant that the generators could not be tested before arrival and two of the machines had to be rewound and some additional minor machining had to be done before the clearance between the running and moving parts was exactly right. It caused a significant delay in the timetable for completion of the station but the modifications introduced solved both problems.

The extensive underground cabling within the station's confines meant a great deal of attention had to be paid to the layout and installation to ensure that the consequences of any incident remained strictly localised. Sophisticated heat and smoke detection systems run the length of the cable systems to provide early warning.

Outside, the 400 kv cable system connecting the station with the grid is also carried underground for aesthetic reasons. In deciding the route, it was found possible to accommodate the two groups of three 400 KV cables making up the two circuits required, in a 2 metre wide trench alongside the old lakeside quarry railway, now run as a tourist railway.

After 3.5 km, the two circuits diverge, one to the Pentir substation has been trenched as part of road widening scheme needed for the civil engineering traffic. It is 11 km in total length. The other circuit follows the old railway route to link with the Pentir-Trawsfynydd overhead line at Penisarwaun.

Analysis

Water cooling of the cables—needed to maintain the current rating and keep insulation down to acceptable limits—was chosen in preference to oil. Although water cooling is more expensive, there were distinct maintenance advantages. The water is cooled in three cooling stations along the route which house circulating pumps and heat exchangers and have been designed to look like cottages.

The CEGB's stand-by plant is now completely hydro-electric

Rapid-response power allows £50m savings

SINCE MARCH, the CEGB's "spinning reserve"—the generating plant kept on standby to meet sudden breakdowns or unexpected upsurges in demand—has become 100 per cent hydro-electric. It represents just one of the new dimensions which Dinorwig has added to the CEGB's day-to-day management of the national grid.

In a nutshell, Dinorwig has changed the way the grid is operated. Since coming on stream nearly 18 months ago, it has replaced the use of more expensive or partially-loaded capacity and allowed the whole CEGB system to be run more flexibly and cost-effectively. The savings secured on the board's total generating bill are put at approaching £50m.

Dinorwig was originally conceived with three basic functions in mind. The first was simply to increase the CEGB's total generating capacity to meet what was then still being projected as a continuous rise in electricity demand. Dinorwig would add a further 1,800MW of capacity to the system.

Second was the need for a rapid-response reserve of 1,300MW in the system to provide emergency backup cover for a new breed of steam-driven generators of 1,320MW then under discussion—double the size of the present largest units.

Third was the need for fine tuning of the frequency of the electricity supply system.

Above: one of the six generator/motors being constructed on site and (left) three of the rotors in the machine hall, which is 180 metres long and 60 metres high. The electrical annexe and control room occupies one side of the main cavern and constitutes one of the largest steel-frame buildings in Wales. The Dinorwig plant is highly automated and has a very much faster emergency response to surges in demand than steam generator equipment. Though the plant could be operated by remote control, a small round-the-clock staff ensures that it always comes in on cue.

Tasks

By the time Dinorwig was ready to generate electricity, however, circumstances were somewhat different. Demand was declining, under the impact of the recession and technological change, and very little growth was projected for the next few years. The 1,320MW units had not been built. Hence there had to be a rethink.

The outcome is that Dinorwig is being used for two basic tasks. The first remains to provide an emergency reserve. However, in the absence of the 1,320 MW units, which would require four turbines on standby, this role is being limited to two of the six turbine generators. Kept spinning in air, they are the fastest means at the grid manager's disposal to respond to breakdowns in the CEGB's largest steam generators of 660 MW and to meet unexpected upsurges in demand (peak lopping).

Previously, the CEGB relied largely upon partially-loaded thermal plant. But apart from being inefficient in terms of fuel utilisation, the typical emergency response of a steam generator would be 15 per cent more power in 15 seconds and a further 15 per cent after three to five minutes. In contrast, Dinorwig achieves 80 per cent in ten to 11 seconds. In short, it has displaced standby capacity which is more expensive to run and less flexible.

Dinorwig's second role is economic generation. The cost of electricity generation within the CEGB system varies according to the type of individual plant being loaded, its age and size, from £8 a megawatt hour (nuclear) to £70 MW-hour (gas turbines). the grid manager's task is to meet the varying demands on the grid by loading the most economic plants while at the same time fulfilling the CEGB's statutory obligation to provide a reliable supply of electricity.

Each day he has to assess the likely requirement in the light of weather conditions, industrial demands, and a range of other variables, including the millions of electric kettles which can be switched on during a TV commercial break, and then match this to the generating capacity available. Dinorwig gives him a new flexibility.

Typically, the new station buys in its power for pumping at night at £18 MW-hour from coal-fired stations which would otherwise be operating only partially loaded. That power is thus available to sell back into the grid at £23 MW-hour. The turn-round efficiency is 78 per cent.

On the face of it, this is not a particularly cheap source of power but, crucially, the cost of generating from thermal plants now takes into account the energy required both to heat up the plant on start-up and the energy lost as it cools after shutdown. This can easily make thermal plant electricity more expensive than Dinorwig's if it is generating for just a short period.

Dinorwig's flexibility of operation extends to five basic operating modes and two special ones. These are:

1—Generating at up to eight different load setting between zero and full power, full power being achieved in 1 min 40 seconds from standstill.
2—Spinning in air, ready for emergency generation in 10-11 seconds.
3—The stationary mode.
4—Spinning in air in a pumping direction.
5—Pumping — always carried out at full load.
6—Black station start—in the event of the collapse of the grid, Dinorwig can start generating autonomously using its own emergency diesel generators and batteries.
7—Back to back pump start—the use of one generator to start another in the event of the variable frequency starting equipment not being available for any reason.

A complete pumping cycle to reduce the lower lake from maximum to minimum takes 6½ hours. To turn round the function of the station completely from full pumping to full load generating takes eight minutes.

The station is highly automated. Providing its vast array of auxiliary equipment is functioning correctly, it can be operated by one person. At the centre of the control system is a microprocessor which monitors a series of 300 steps required to start up individual units. And to avoid malfunctioning signals halting the start-up, redundancy techniques have been incorporated in the command system. Thus, for example, there are three measures of oil pressure and the microprocessor takes its cue from a two out of three voting arrangement.

The net result is that the number of permanent jobs created at Dinorwig is just 76. To service three shifts round the clock seven days a week there are six teams of six, consisting of a senior engineer, a first assistant engineer, a mechanical fitter, an electrical fitter, an instrument craftsman and a general duties assistant.

Monitoring

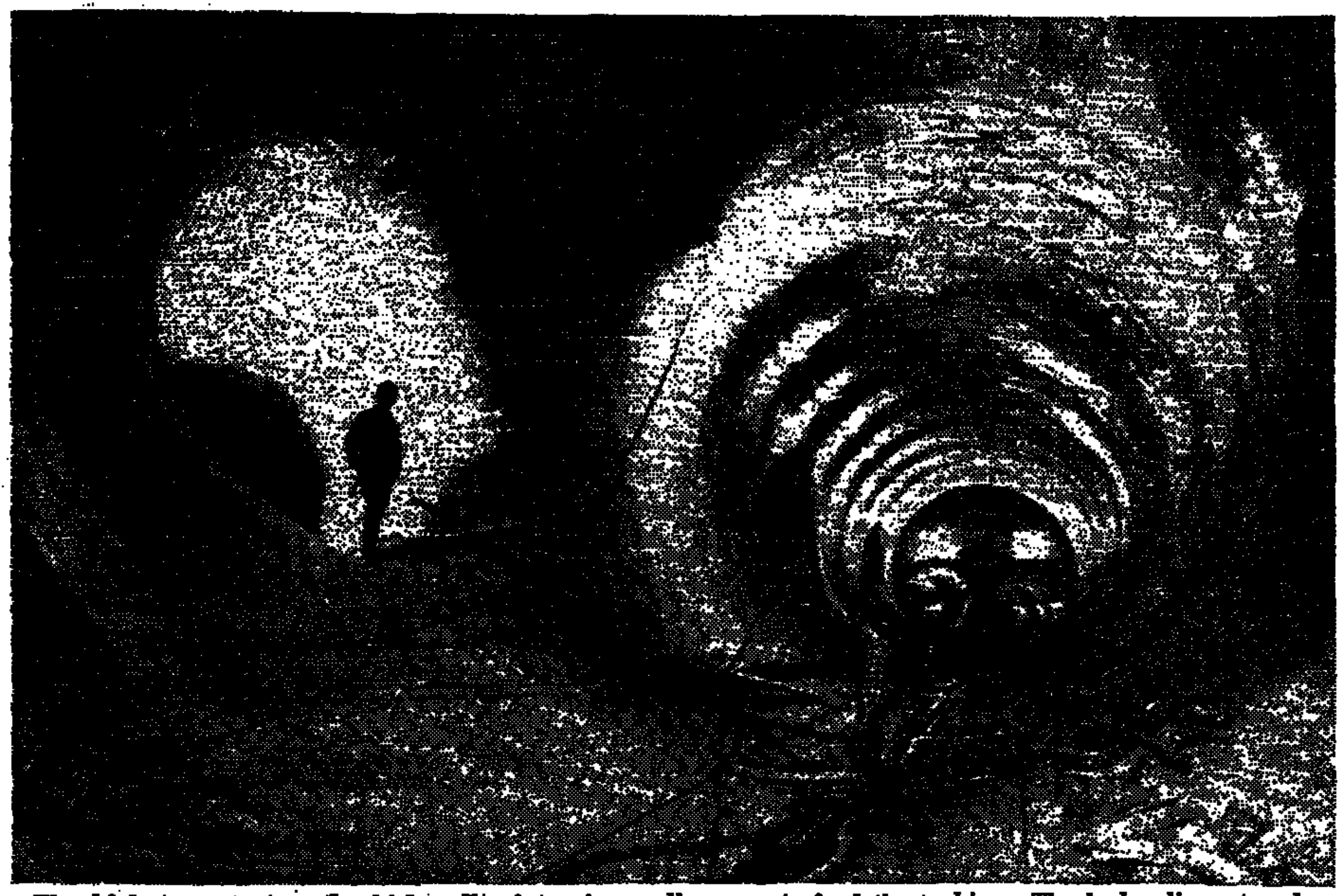
The remaining staff consist of 10 engineers on daytime duty, nine administrative staff, craftsmen and general duty assistants.

Sitting at the main desk in the underground control room, the engineer has ranged around him a series of display panels monitoring everything within the station. These include a hydraulic control or water management panel which displays visually the water levels in the hydraulic system and, in digital form, the amount of generating capacity available and the amount of energy required to pump; a fire protection monitoring panel; an electrical transmission panel showing the 18KV (the voltage at which power is generated) and 400KV (at which it is transmitted) systems; a works electrical panel; and, behind him, a unit control desk with which he can control individual units in abnormal situations.

This desk has to be used for back-to-back start up, the only mode of operation requiring two men to operate it rather than one.

Data logging—reports on the condition of the station's units produced on an hourly, daily and weekly basis—are also carried out automatically.

Indeed, modern communications technology is such that Dinorwig could be operated remotely from grid control headquarters. Remote control is the norm for a number of French hydro-electric stations. But the structure of the French grid is such that if a particular hydro station fails to come in on cue, it can be easily covered from elsewhere. Dinorwig, on the other hand, is too valuable to the efficient operation of the CEGB system to be left entirely in the hands of computers.



The high-pressure tunnel which splits into six smaller ones to feed the turbines. The hydraulic system has nine kilometres of tunnels, built in the heart of the mountain

Tunnelling through slate brought tricky problems which geologists helped to solve

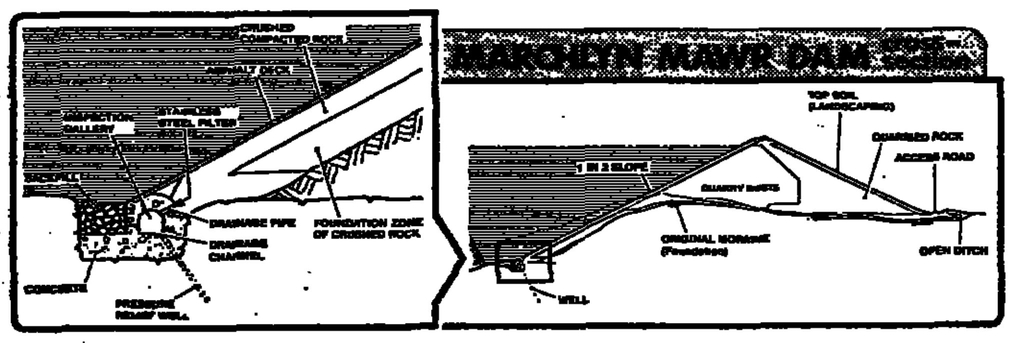
Hard task for civil engineers

At one stage, MBZ, the main contractors, were blasting at 13 different faces with—once it was established as safe—each team blasting when they were ready rather than at set times.

The safety of the roof in the EVERYBODY who was on site in the early days still remembers the collapse of Dinorwig's first exploratory tunnel as if it was yesterday. It occurred at 7.55 am on a Tuesday just as the tunnelling gang was walking towards the entrance. Some 2,000 tonnes of slate collapsed and all that remained of a vehicle parked just inside the entrance was its number plate.

Former slate quarrymen recruited for the project had warned the exploratory tunnel was being started in the wrong place. The rock at that point had been rendered unstable by previous slate quarrying operations, they said.

Even so, for some months the future of the whole project hung in the balance. Tunnelling in slate was an unknown quantity and there were suggestions that it might be impossible. However, the jitters subsided and the initial problem of the exploratory and access tunnel was overcome by driving into the mountainside 100 yards further west via an exposed Dolerite dyke — hard igneous rock intruded into the slate after it had been formed at the end of the Cambrian era some 400m years ago.



Burrowing

Tunnelling in slate turned out to be akin to burrowing through a pile of sugar cubes rather than solid rock. Dinorwig's Cambrian slate remains under enormous geological pressure—2,000 lbs sq ins in one horizontal direction, 1,000 lbs sq ins in the other and 1,000 lbs sq ins vertically. At the same time, it contains regular cleavages which divide the rock into blocks.

The tunnelling problem was mastered by taking account of this geology and indeed turning it to advantage. Immediately after each blast, geologists went in to establish, with the help of computer techniques, those slate blocks which were "kinetically admissable" (those blocks which were holding up the roof arch and therefore needed to be pinned with rockbolts or tendons). This saved substantial sums by doing away with the need for steel rock supports.

The geologists were followed within minutes by men with specially-designed shotcrete (spray concrete) machines which pinned the tunnel with a 2 in thick skin of concrete. Shotcrete although not entirely new, had never been used on such a scale before. A cement depot was established at Bangor Station and the material transported to the site ready-mixed by road. The high-pressure guns used for tunnel spraying were purpose built for Dinorwig after the original hand-held nozzles were found to be inadequate for the job.

It was extremely messy. Some 30 per cent of the shotcrete failed to stick and was wasted. But its great virtue was that it rendered the roof safe almost immediately for subsequent working. If there was any movement in the slate this showed in flaking of the shotcrete. Fortunately there were no significant collapses.

The main hall was excavated by creating three tunnels and then blasting down. This meant providing more access tunnels than was originally envisaged. But they proved to be useful when it came to getting in the plant and equipment.
main cavern was established by driving small high-level tunnels above it—now used as ventilation shafts—and inserting downward and diagonal probes to check that there was no movement.

A fairly new system was used for drilling the high pressure shaft. The first stage was the driving of an 11 in diameter vertical bore hole from the surge pond area down to meet the high-pressure tunnel which was excavated from the station area. The borehole was subcontracted to a French company using American equipment on a "no-hit—no pay" basis. Its first bore stayed on line until it was within 100 metres of the high-pressure tunnel at the bottom but it then veered off, ending up 15 metres astray. A second attempt went even further astray, at which point it was decided to drill up to meet the original bore at the point where it began to stray.

Advantage

The second stage was the use of a back-reaming device to widen the shaft to 10ft diameter. The third stage, carried out by Thyssen, was its extension to 10 metres diameter. The big advantage of the two initial stages being that they created a central mucking hole for disposing of the third stage waste material. As this fell to the bottom of the shaft it was carried away. The low-pressure tunnels were built by conventional drill and blast.

All the main hydraulic tunnels had to be lined with concrete, another major task, but one which went quickly and smoothly using Italian shutters on rails. Because the slate was so dry it was possible to dispense with grouting of the high-pressure shaft and tunnel, which course had to be leak-proof, before concreting. The lining of this shaft and tunnel with 7,400 cubic metres of concrete was accomplished in 54 days, working around the clock with just weekend breaks.

By contrast, construction of the dam at Marchlyn Mawr was straightforward. The main problem encountered was the high incidence of thick hill fog, as well as winter snow and summer rain, descending upon what is now the highest reservoir in Britain. At times it made working conditions impossible.

Material for rebuilding and enlarging the natural moraine dam to produce a structure 6.8 metres high was readily available from a nearby abandoned slate quarry which, in turn, is now a great deal tidier.

Peris, the lower lake, was virtually doubled in size by removing the vast quantities of slate waste generated by the Dinorwig quarry during a century and a half of intensive working.

Tunnelling of a diversion tunnel—to allow, in the first place, the lake to be drained—was in different rock and as it turned out, presented more problems than the slate tunnelling. Steel supports had to be used on a significant scale.

But conveniently, most of the material generated by Llyn Peris's enlargement was disposed of by filling in the naturally deep centre of the lake. It is now far shallower than it was, but for the purposes of the hydraulic system, water below a certain level was superfluous.

The remainder of the estimated 9m tonnes of slate which had to be moved to shape the lower reservoir was disposed within the old quarry workings which were also subject to a general tidying up to make them safe.

Fine industrial relations record

NOT LEAST among the success stories surrounding the construction of Dinorwig was its excellent industrial relations record. During a period when a number of other major UK construction projects were being hit by long, difficult strikes, no dispute at Dinorwig lasted longer than three weeks.

It was a remarkable record given the complexity of the project and the fact that, at peak, the scheme was employing 2,600 men on difficult and dangerous work.

A number of factors went in to creating an atmosphere of common endeavour. But clearly among the most important were:

● The commitment to employ mainly local labour. The original agreement with the county council to minimise social disruption and provide badly-needed local employment opportunities committed the CEGB to a figure of 70 per cent.

In the event, the proportion was well over 90 per cent during most of the construction period. As a result, the workforce continued to live in their home communities and the kind of discontents that can blow up in a work camp environment were avoided. Workers travelled up to 50 miles each day in special buses.

● The flexible attitude adopted by the trade unions in the light of Dinorwig's local recruitment policy and its relative isolation from the customs and practices of other major civil engineering sites.

The Transport and General Workers Union, the main negotiating union, displayed a determination to avoid such problems as demarcation disputes and leapfrogging of wage claims. Good wages were paid to the tunnelling teams, upwards of £200 a week, and this was reflected in the pay levels of the rest of the site.

● The unprecedented attention to training and safety which was backed enthusiastically by the contractors and equipment manufacturers.

The Scandinavian manufacturers of drilling equipment, for example, sent specialists to train operatives so that they could work the equipment in as effective and safe a manner as possbile. A special training tunnel was established for teaching tunnelling teams. During training, which lasted three months, men were paid a basic wage of £60 a week plus 19p an hour. The EEC Social Fund chipped in a large grant towards training costs.

Safety policy was worked out in consultation with the Health and Safety Executive, the Employment Medical Advisory Service and the Mines and Quarries Inspectorate, and the procedures adopted reflected the kind of attention to detail which the CEGB has adopted in relation to the nuclear power industry rather than the usual practice—and level of risk—accepted in the civil engineering industry.

Medical checks

Besides safe working procedures, close attention was also paid to health matters. All personnel were subject to medical checks before starting on site and regularly during their employment. The ventilation system was radically redesigned to provide a healthier underground working environment. In the days of slate quarrying Dinorwig slate was infamous for its particularly high silica content and the consequent high incidence of silicosis among the quarrymen.

There is no doubt that this detailed attention to training safety paid off in industrial relations terms and workers were able to work machines and equipment effectively and so achieve their bonuses.

Beyond these factors, people associated with the scheme pay tribute to the personalities involved, particularly Mr Iorwerth Ellis, the CEGB's Welsh-born project manager.

Disputes were resolved quickly on a number of occasions through Mr Ellis's ability to talk to and negotiate with the trade union representatives in Welsh. This was not just a matter of linguistics; in the words of one trade unionist: "He understood the needs of the area and would fight for the men."

Another influence, not to be underrated, was the widespread hope—in an area with an unemployment level approaching 18 per cent—that if Dinorwig went well, it would be followed immediately by another major CEGB scheme. Certainly this was a possibility when the project started.

However, as a result of the dramatic change in circumstances of the electricity supply industry during the period of Dinorwig's construction, another hydro-electric pumped storage scheme at least is ruled out for at least eight to ten years. In the end, while a number of former Dinorwig men have been able to use the certificate they received at the end of training to find skilled work on major civil engineering projects in the Middle East and Australiasia, many men have been forced to return to the dole pending a better economic climate.

Flexible approach to contracts

AMONG THE usual features of the Dinorwig scheme has been the way in which it was contracted and managed. The demands of the scheme created a need for changing solutions.

Three major problems confronted the CEGB at the outset: the projects scale and complexity, even by CEGB standards; the civil engineering industry's lack of experience of tunnelling in slate; and, third, the social and environmental implications.

The board, then led by Sir Arthur Hawkins, decided to break with precedent and appoint Mr Iorwerth Ellis, a Welsh-speaking Welshman, to oversee execution of the whole project on site, rather than follow the usual practice of locating the project manager at the general development and construction division's headquarters at Gloucester.

Mr Ellis's permanent presence on site not only gave the project a drive and momentum which might otherwise have been dissipated in a welter of communications between Llanberis and Gloucester, but it also contributed to better industrial and public relations in an area where the first language for most of the population is Welsh.

The workforce and the local authorities felt that this move gave them someone at the top with a sympathetic ear who understood their particular concerns and preoccupations and would do his best to meet them.

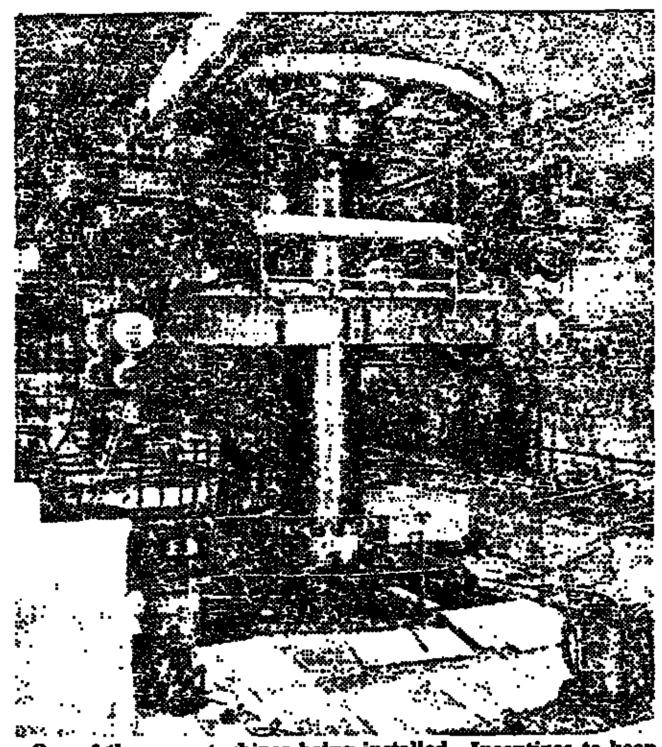
The initial idea of the CEGB and consultant engineers, James Williamson and Partners (Glasgow), was to divide the project into seven separate major contracts and invite competitive tenders in the normal way. However, when it came to the crunch, the whole approach had to be radically changed.

Potential contractors, already worried about the unknown problems of tunnelling in slate had their fears heightened by the collapse of the first exploratory tunnel after it had been driven just eight feet into the quarry face. On top of this, they were being invited to tender competitively during the period of hyper-inflation which followed the 1973 world oil crisis. The result was that the civil engineering work was packaged into two major contracts — one for Marchlyn Mawr (upper) reservoir. The other, far larger, for the underground and Llyn Peris (lower) reservoir works.

Potential contractors were then invited on site to be given a detailed explanation of the scheme by the board's project team and the consultant engineers, and encouraged to form consortia to bid for the work on the basis of a target price/cost-reimbursable contract. The tendered profit percentage depended upon the ratio of actual cost to the target price.

Three consortia put in for the main contract on this basis. And after a complex assessment, it was awarded to a consortium led by Sir Robert MacAlpine and Son in partnership with Charles Brand and Son, the tunnelling subsidiary of the French Kier group, and Conrad Zschokke of Switzerland, a company with long experience of drill and blast tunnelling in the Alps.

Within MBZ, as it was named thereafter, MacAlpine was in overall charge. Brand led the underground drilling and blasting work, backed up by MacAlpine, while Zschokke worked out the tunnelling strategy and complex logistics of excavating more than 3m tonnes of rock from deep inside the mountain. (Interestingly, it was not Zschokke's first association with North Wales. The man who built the Swiss-style rack and pinion railway to the top of Snowdon went on to become Zschokke's chief engineer.)



One of the pump-turbines being installed. Incentives to keep costs down were maintained despite considerable changes in the management and contract structure.

Remote

The upper reservoir contract was awarded to Gleeson Civil Engineering on a normal competitive basis. Due to its remoteness, separate site offices were established near the site to house the majority of Gleeson's staff and their consultant engineers, Binnie and Partners. The main headquarters of the project were located in a purpose-built office complex on the site of a disused RAF camp at Glyn Rhonwy, about a mile from Dinorwig itself.

In theory, the main contractor's profit level was dependent upon minimising the actual cost. But it also required the CEGB to adjust the target price in the light of unforeseen difficulties, changed working methods and modifications to the scheme as it progressed. Hence there was room for haggling over the merits or otherwise of particular targets with claims being investigated at the CEGB's expense. Three years into the scheme, a good deal of paper was beginning to fly between MBZ and the CEGB.

In September 1979, therefore, the form of the contract was changed to a "cost plus fixed management fee," with financial incentives for the completion of two key objectives within a set time limit. These were completion of the civil engineering works required in the machine hall before installation of the turbines could begin; and the second was completion of the hydraulic system in a state of readiness for flooding.

The contract alteration was also accompanied by an official change in the structure of the scheme's management.

Whereas week-by-week control was exercised originally by an executive control team consisting of representatives of the CEGB, the consultants and the contractors, in time it came to be run by a management troika, consisting of Mr Ellis as chairman, Mr David Eaton project management of MBZ, and Mr Iddon Jones, James Williamson's resident partner. The new contract reflected this reality.

There were suggestions at the time that this revision would remove the contractor's incentive to keep down costs. Mr Eaton rejected this, arguing that it was in the interests of the MBZ members consortium to satisfy the CEGB if they wanted further contracts in the future.

In the event, MBZ not only met both main target dates, but did so at substantially lower cost than it forecast at the time of the contract change.

In the circumstances, there have been suggestions that Dinorwig's latter contract provides a precedent for other major civil engineering projects. Mr Ellis's view is that it would not have been possible without the trust which had grown up between the parties involved after they had been working on the project for three years.

"It created a great deal more common ground and enabled us to concentrate our energies on the main enemy — the overall cost of the project."

Emphasis on training

Iorwerth Ellis: priority for local workers.

THE TUNNELLING equipment and some of the techniques used at Dinorwig had only been used previously in Britain on a very small scale if at all. Therefore, it was considered necessary by Mr Iorwerth Ellis, project manager, to train the required labour force off the production faces and to establish a special training scheme. He also insisted that:

(a) All labour recruited specifically for the project should be recruited through a Department of Employment Job Centre established on site.

(b) Priority would be given to local people living within the travel to work area. Local was defined as someone who had been working in the area for five years previously.

A committee was established to formulate the training policy. All interested parties were represented—the trade unions, the contractors, the various industry training boards, the Department of Employment, the civil consultants and the board.

The cost of training—about £4m—was paid for by the CEGB and a grant was obtained from the EEC.

High standards

The tangible benefits were significant. Standards of safety and productivity were high and the quality of the workmanship excellent. Once established, the training programme was extended to cover many tasks and skills including assembly of the generator/motors wich were too large to be transported to site. This work is normally carried out in a factory.

There were also intangible benefits which helped to establish good industrial relations.

Another innovation was to set up regular meetings with the Health and Safety Executive, the contractors' concerned, the civil consultants, and the board staff including the regional medical officer. The Health and Safety Executive were represented by members of the Employment Medical Advisory Service, the Factory Inspectorate and the Mines and Quarry Inspectorate.

Discussions were held early enough so that any changes in the proposed design or method of construction found essential could be carried out without affecting the programme. Mr Ellis says: "The help and advice we received from those outside the team made a significant contribution to Dinorwig's excellent safety record."

Conflict

There were many conflicts of interest in this multi-disciplined multi-contractor / organisation project. "It was my task to minimise areas of conflict as far as possible and when a conflict of interest did arise to deal with it firmly and quickly."

One way of minimising conflict was by changing the terms of the contract between the Board and the contractor, in order to ensure that their interests were as allied as possible. An element of risk was involved in such an exercise and such decisions were based on proven mutual trust.

Another way was by establishing the site payment policy, (before the National Large Site Agreement) that ensured within the limits of rough justice that the employees of different contractors at Dinorwig had an opportunity to receive similar earnings, for similar efforts, under similar conditions. This avoided the leapfrogging that was occurring on other large sites.

Mr Ellis praises the constructive approach that was adopted by *trade union officers, shop stewards* and the contractors' managements and he comments: "Dinorwig attracted all kinds of visitors from all over the world and I profited from meeting many of them."

CEGB considers the future

NERVE CENTRE of the Central Electricity Generating Board's *power station construction* is the generation construction and development division at Barnwood near Gloucester. Established in 1971, it has been geared to handling as many as 12 major projects or more at a time.

Dinorwig has been the prime concern of 47 CEGB engineers and dozens of contracts, financial and clerical staff, divided between Barnwood and Llanberis, for a quarter of their working lives.

But the division is now faced with a difficult few years as the large workload of the 1970s and early 1980s nears completion *and demands upon its expertise* in the organisation of power station construction dwindle.

Dinorwig is just one among a number of major projects which have been completed recently or are at the commissioning stage. Of 10 projects currently still in the pipeline, three or four will be finished this year. In two years' time, the division could be down to just two major domestic projects — the final phase of Drax, in Yorkshire, due to be completed in mid-1986, and Heysham Two due to be finished the following year.

That will be the situation unless there is an early decision to press ahead with construction of a pressurised water nuclear reactor (PWR) after the Sizewell B inquiry — or an alternative form of power station.

The division's basic problem is one of keeping the organisation and expertise together to be ready to tackle the electrical energy generation requirements of the 1990s when, leaving aside the question of the trend of demand, a number of existing stations will reach the end of their operational life and require replacement.

It is a problem facing not just the division itself, but also the construction industry and the manufacturers of power station equipment. The number of staff at Barnwood has been reduced already from a peak *of some 2,100 four years* ago to about 1,700. The retirement of a bulge of personnel who joined the CEGB just after the war, as the industry was beginning its expansion, will provide an opportunity to trim numbers still further.

Thereafter, says Mr Ron Burbridge, director of project management, there should be enough work to keep a more tightly-staffed division fully occupied and maintain its role as a centre of excellence.

Conversion

Notwithstanding the miners' strike, the division expects to be called on to supervise another oil-to-coal conversion of an existing power station. It also sees room for some more small hydro-electric stations akin tothe one now being built at Keilder in Northumberland.

It has also been doing a certain amount of consultancy work abroad, notably on the Rihard coal-fired station in India, the Castlepeak B station in Hong Kong, being built by the China Light and Power Company, and a number of projects in Australia.

But Mr Burbridge stresses *that the division is anxious not* to upset the British consultant engineering industry by muscling in on its traditional overseas markets in a big way.

The division's expertise extends to the mechanical and electrical aspects of station design, turbines, nuclear installation, materials and pressure plant engineering, and piping, heating and ventilation systems.

While there is regret that construction of another Dinorwig is unlikely to be justified for at least another eight to ten years, the division will have work to do, *carrying out* analyses and providing technical advice and back-up on the maintenance of the CEGB's existing power station capacity.